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PART III

UNSTEADY LOW-SPEED WINDTUNNEL TEST OF A STRAKED DELTA WING, OSCILLATING IN PITCH

PART III: PLOTS OF THE ZEROTH AND FIRST HARMONIC UNSTEADY PRESSURE DISTRIBUTIONS (CONCLUDED) AND PLOTS OF STEADY AND FIRST HARMONIC UNSTEADY OVERALL LOADS

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NATIONAL AEROSPACE LABORATORY (NLR)
AMSTERDAM, NETHERLANDS

APRIL 1988

FINAL REPORT FOR PERIOD JUNE 1985-AUGUST 1987

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Results of a wind tunnel test of an oscillating straked wing. The report provides unsteady airloads and pressure distributions for a range of incidences (-8 to 50 deg.) and amplitudes (1 to 16 deg.). The wind speed was 80 meters/second, which provided reduced frequencies up to 0.50 based on root chord. The zeroth and first harmonic as well as the continuous time history of the pressure and overall loads were measured. Flow visualization was performed for flow of 30 meters/second using a pulsating laser light sheet.

In this part III appendix A presents the remainder of the unsteady zeroth and first order harmonic components of the unsteady pressure distribution plots for which the preceding runs were given in appendix B of part II.

In appendix B, plots of the steady and the zeroth and first order harmonic components of the unsteady overall loads are presented. These results are presented as functions of angle of attack, frequency and amplitude in various forms for all measured components.

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PART III: PLOTS OF THE ZEROTH AND FIRST HARMONIC UNSTEADY PRESSURE DISTRIBUTIONS (CONCLUDED) AND PLOTS OF STEADY AND ZEROTH AND ZEROTH AND FIRST HARMONIC UNSTEADY OVERALL LOADS

12. PERSONAL AUTHOR(S) CONTD

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Geurts, E.G.M., " " " " "
Persoon, A.J., " " " " "
Retel, A.P., " " " " "
Zwaan, R.J., " " " " "

FOREWORD

This report summarizes the results of the windtunnel test of an oscillating straked wing conducted under a cooperative program of research between General Dynamics Fort Worth Division, Fort Worth, Texas, and the National Aerospace Laboratory (NLR), The Netherlands. The model and support system was designed and fabricated at NLR under a separate program with General Dynamics and NLR funding. The test preparation, windtunnel test and reporting were performed at NLR under Air Force Contract F33615-85-C-3013, for the Flight Dynamics Laboratory of the Air Force Wright Aeronautical Laboratories, Wright-Patterson Air Force Base, Ohio. The work was administered by Mr. D.W. Kinsey of the Aeromechanics Division (AFWAL/FIM). Additional technical monitoring support was provided by Mr. T. Cord of the Flight Control Division (AFWAL/FIG).

The program manager and principal investigator was Dr. A.M. Cunningham Jr. at General Dynamics and Mr. R.G. den Boer was the principal investigator at NLR. Mr. den Boer was assisted by the following NLR specialists: C.S.G. Dogger, E.G.M. Geurts, A.J. Persoon, A.P. Retèl and R.J. Zwaan.

This report consists of six parts. Part I presents a general description of the model and test program and a discussion of the results. Part II contains the steady pressure distribution plots and the major part of the zeroth and first order harmonic unsteady pressure distribution plots. Part III contains the remainder of the unsteady pressure distribution plots and plots of the steady and the zeroth and first order harmonic unsteady overall loads. Part IV contains time history plots of the unsteady pressures and overall loads. Part V contains power spectral density plots of the overall loads at harmonic oscillation and time history plots of overall loads for (1-cos) model motions. Part VI contains results of the flow visualization program.

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LIST OF SYMBOLS

ALPHA, α	wing incidence	(deg)
b	local wing span	(m)
bw	wing span (bw = 0.8000)	(m)
BETA, β	sideslip angle	(deg)
c	local chord	(m)
Cl	wing rolling moment coefficient	
(Cl)m	mean wing rolling moment coefficient (Cl)m = l/(Q*S*bw)	
(Cl)i	unsteady wing rolling moment coefficient (Cl)i = l/(Q*S*bw*dα) (Cl)i = Re(Cl) + i Im(Cl)	
Cm	wing pitching moment coefficient	
(Cm)m	mean wing pitching moment coefficient (Cm)m = m/(Q*S*cr) ref. axis x/cr = 73.27 %	
(Cm)i	unsteady wing pitching moment coefficient (Cm)i = m/(Q*S*cr*dα) ref. axis x/cr = 73.27 % (Cm)i = Re(Cm) + i Im(Cm)	
Cn	wing yawing moment coefficient	
(Cn)m	mean wing yawing moment coefficient (Cn)m = n/(Q*S*bw)	
(Cn)i	unsteady wing yawing moment coefficient (Cn)i = n/(Q*S*bw*dα) (Cn)i = Re(Cn) + i Im(Cn)	
CN	wing normal force coefficient	
(CN)m	mean wing normal force coefficient (CN)m = N/(Q*S)	
(CN)i	unsteady wing normal force coefficient (CN)i = N/(Q*S*dα) (CN)i = Re(CN) + i Im(CN)	
Cp	pressure coefficient	
(Cp)m	mean pressure coefficient	
(Cp)i	unsteady pressure coefficient (Cp)i = p_1/(Q*dα) (Cp)i = Re(Cp) + i Im(Cp)	
cr	root chord (cr = 0.7855)	(m)
CT	wing tangential force coefficient	
(CT)m	mean wing tangential force coefficient (CT)m = T/(Q*S)	
(CT)i	unsteady wing tangential force coefficient (CT)i = T/(Q*S*dα) (CT)i = Re(CT) + i Im(CT)	
CY	wing side force coefficient	

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LIST OF SYMBOLS (Cont'd)

(CY)m	mean wing side force coefficient (CY)m = Y/(Q*S)	
(CY)i	unsteady wing side force coefficient (CY)i = Y/(Q*S*dα) (CY)i = Re(CY) + i Im(CY)	
DALPHA, dα	harmonic oscillation: amplitude of unsteady wing incidence	(deg,rad)
f, FREQ	frequency	(Hz)
HARM	harmonic component (HARM = 0: mean) (HARM = 1: first harmonic)	
i	SQRT(-1)	
l	wing rolling moment (figure 1, part I)	(Nm)
m	wing pitching moment (figure 1, part I) ref. axis x/cr = 73.27 %	(Nm)
MACH	freestream Mach number	
n	wing yawing moment (figure 1, part I)	(Nm)
N	wing normal force (figure 1, part I)	(Nm)
NO	number of pressure transducer	
p	pressure at model surface	(Pa)
ps	static pressure	(Pa)
pt	total pressure	(Pa)
Q	dynamic pressure	(Pa)
REDFR	reduced frequency, REDFR = pi * f * cr/V	
RUN	run number	
S	wing area (S = 0.2640)	(m**2)
T	wing tangential force (figure 1, part I)	(N)
T	stagnation temperature in settling chamber	(deg C)
V	freestream velocity	(ms**-1)
x	chordwise coordinate in wing reference plane apex: x=0 (figures 1, 5, part I)	(m)
Y	wing side force (figure 1, part I)	(N)
y	spanwise coordinate in wing reference plane (figures 1, 5, part I)	(m)
Y	wing side force (figure 1, part I)	(N)

LIST OF SYMBOLS (Cont'd)

GREEK

α,ALPHA	wing incidence	(deg)
$d\alpha$,DALPHA	harmonic oscillation: amplitude of unsteady wing incidence	(deg,rad)
β,BETA	sideslip angle	(deg)

SUBSCRIPTS

m	mean
i	unsteady

APPENDIX A

PLOTS OF THE ZEROTH AND FIRST ORDER HARMONIC COMPONENTS OF THE UNSTEADY PRESSURE DISTRIBUTIONS

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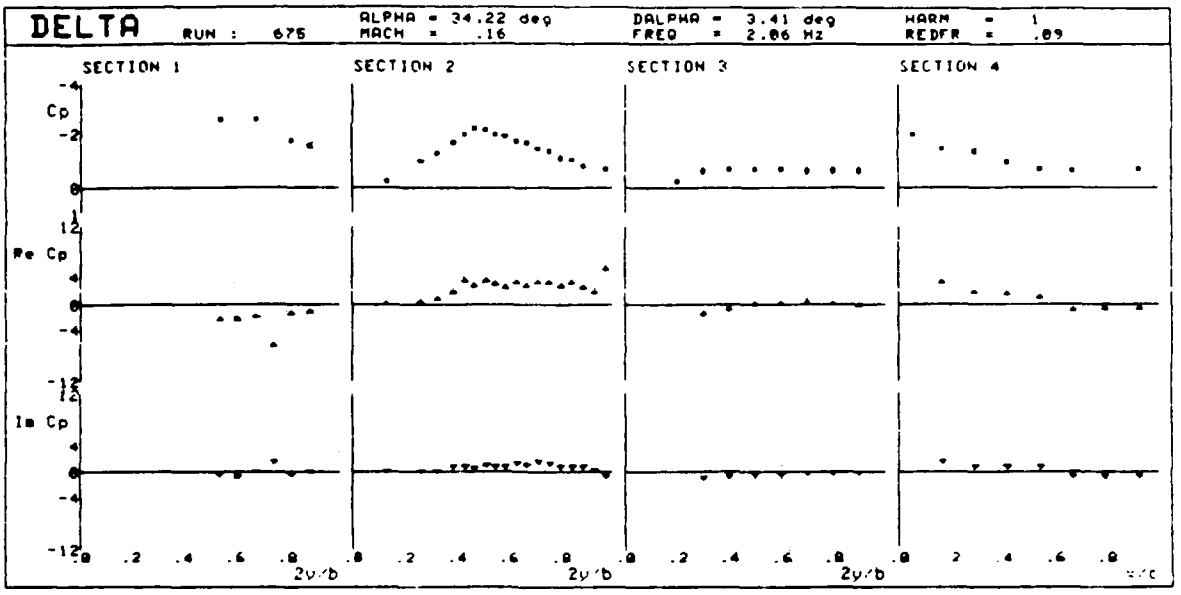
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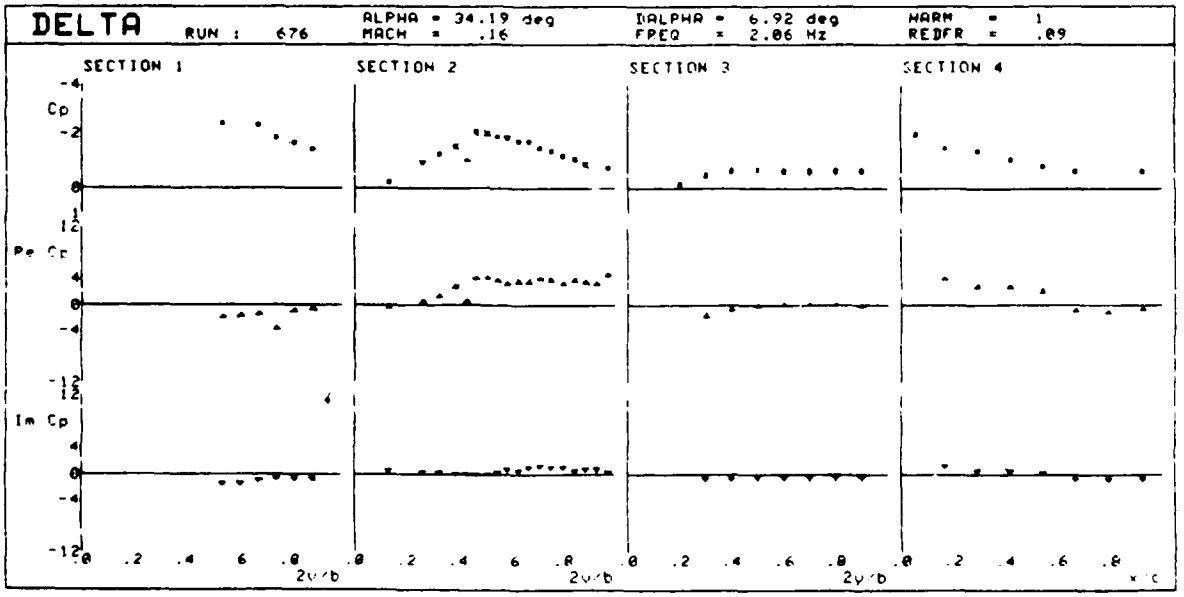
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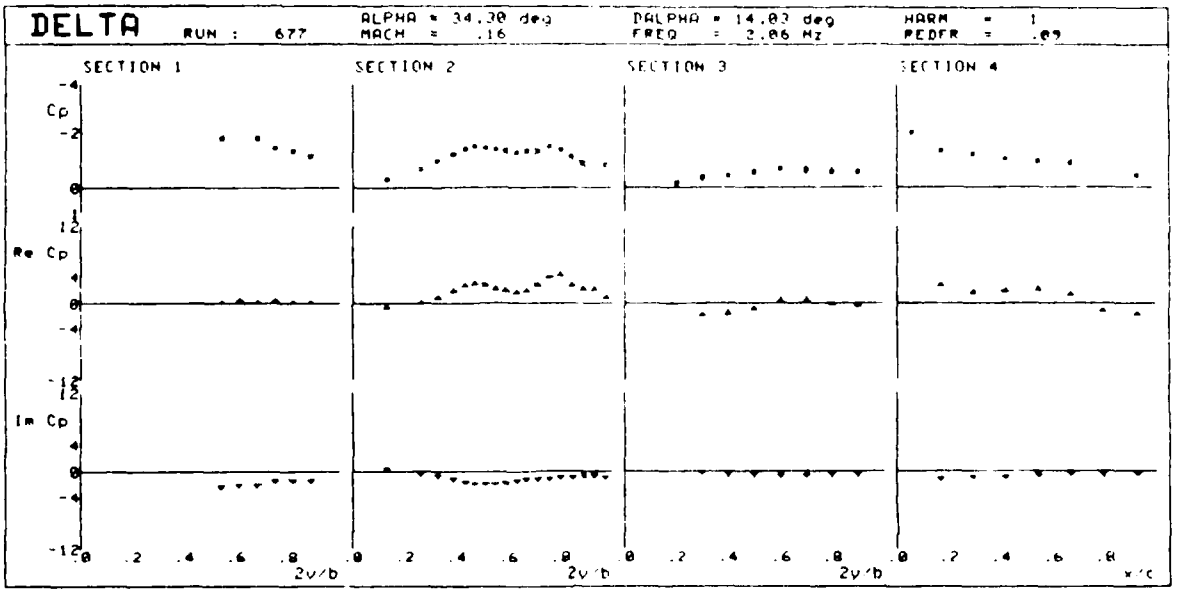
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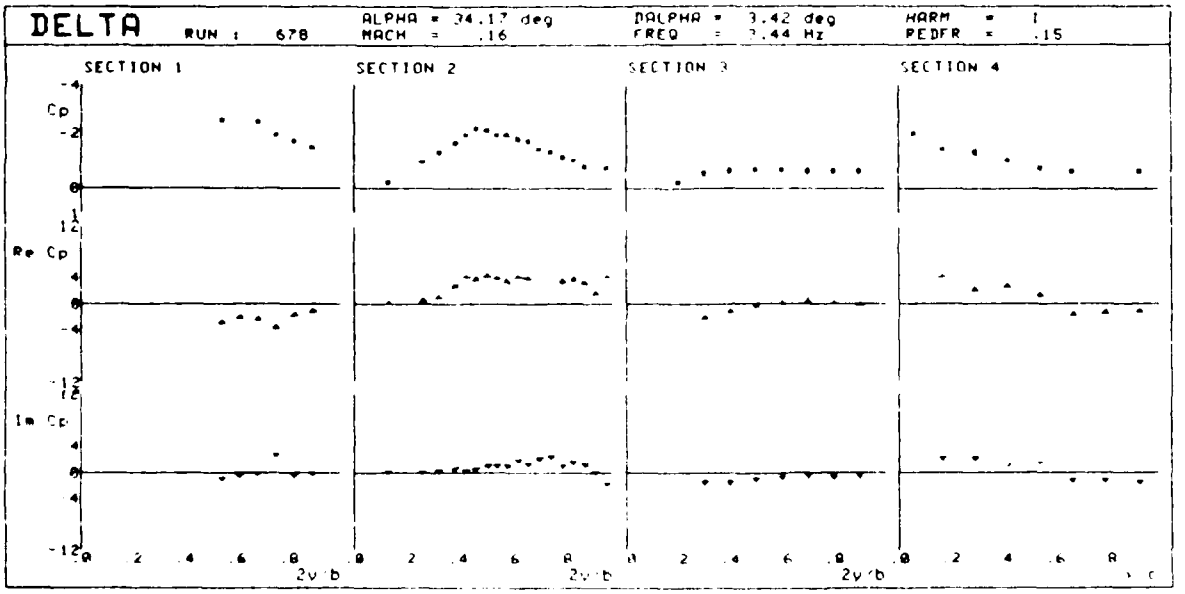
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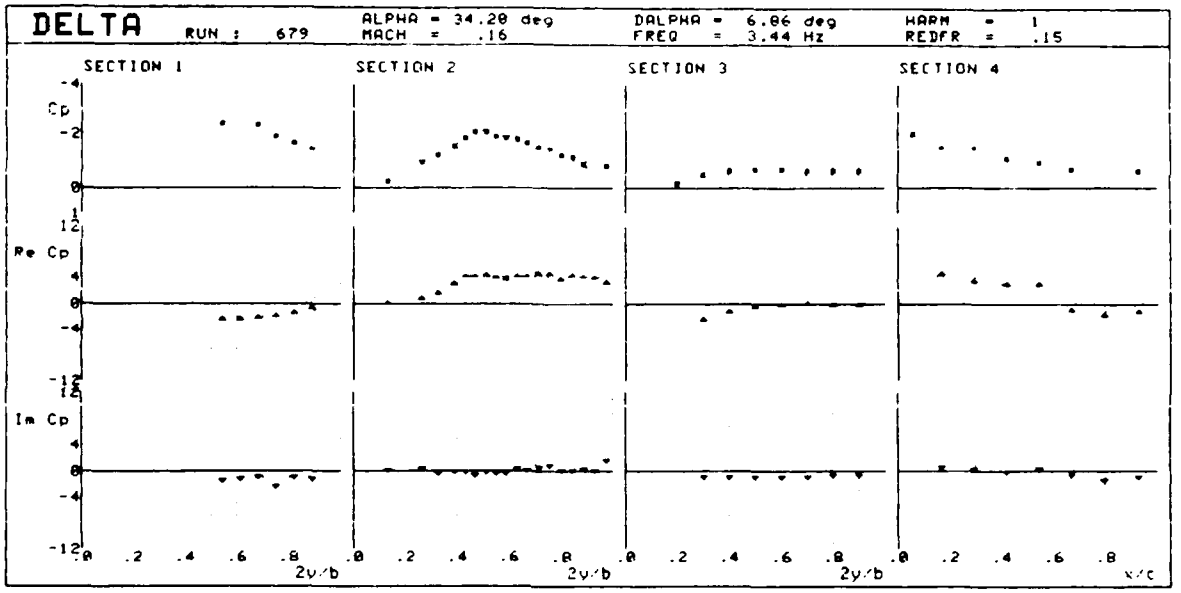
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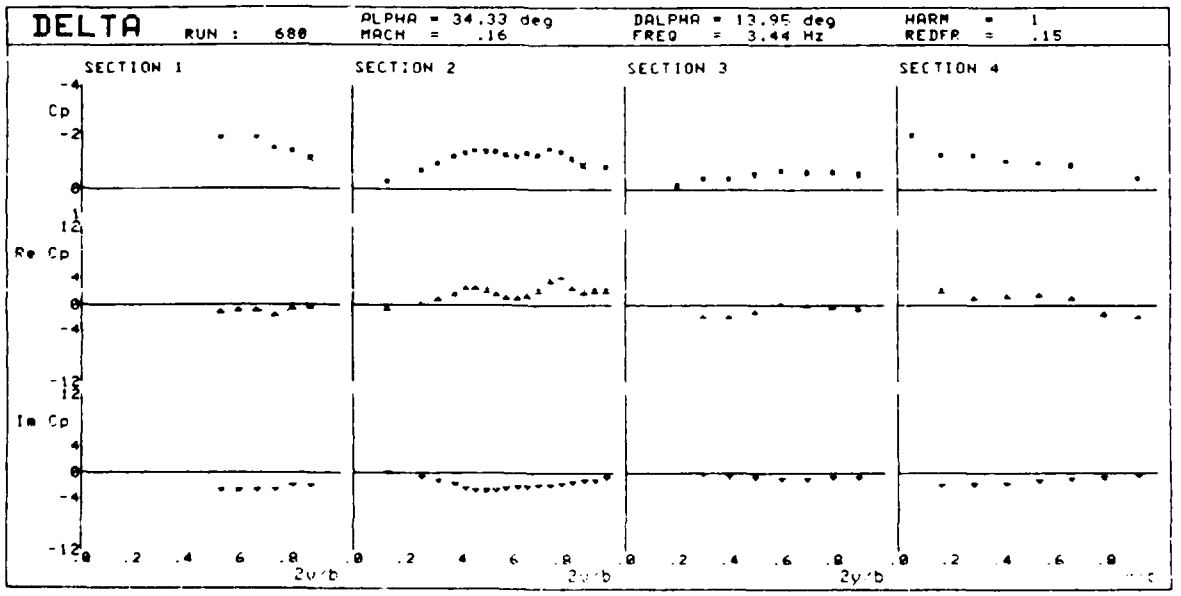
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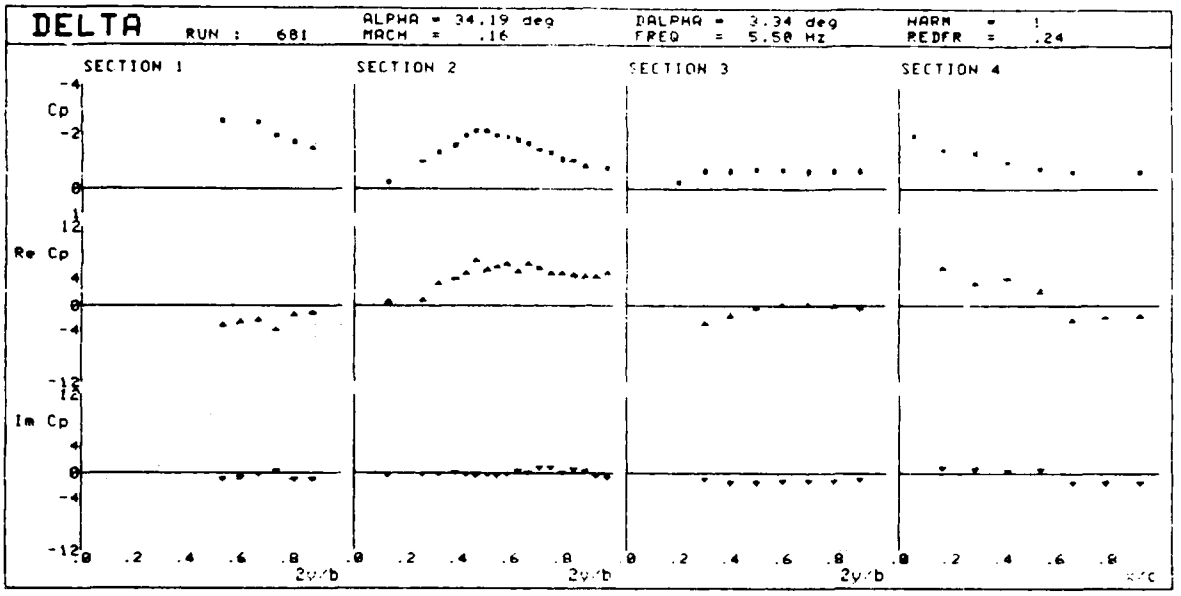
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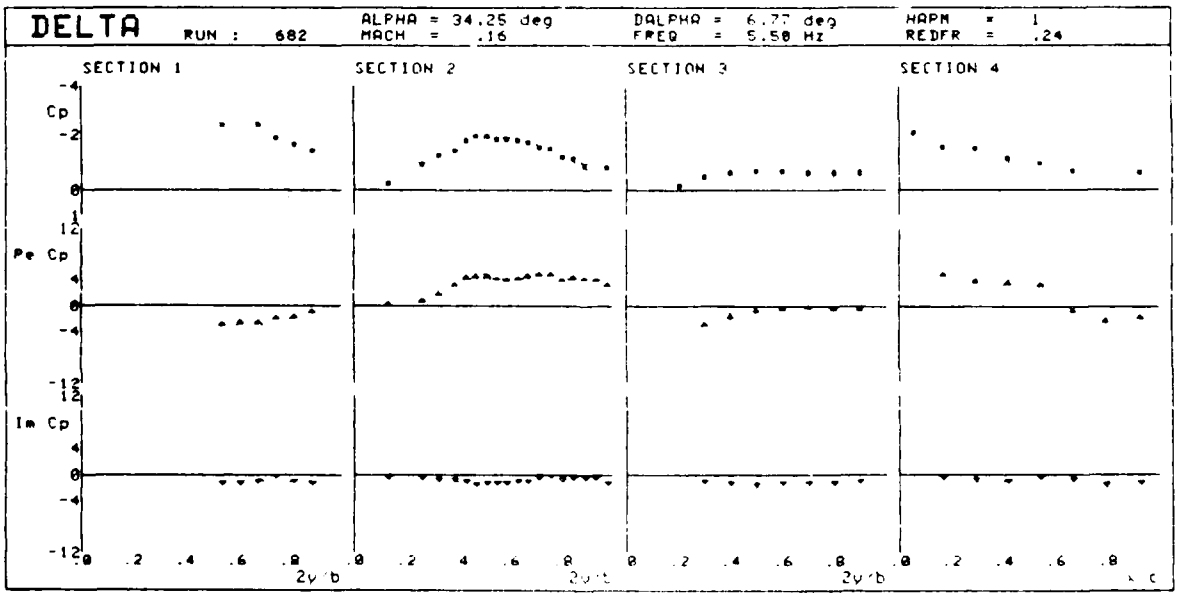
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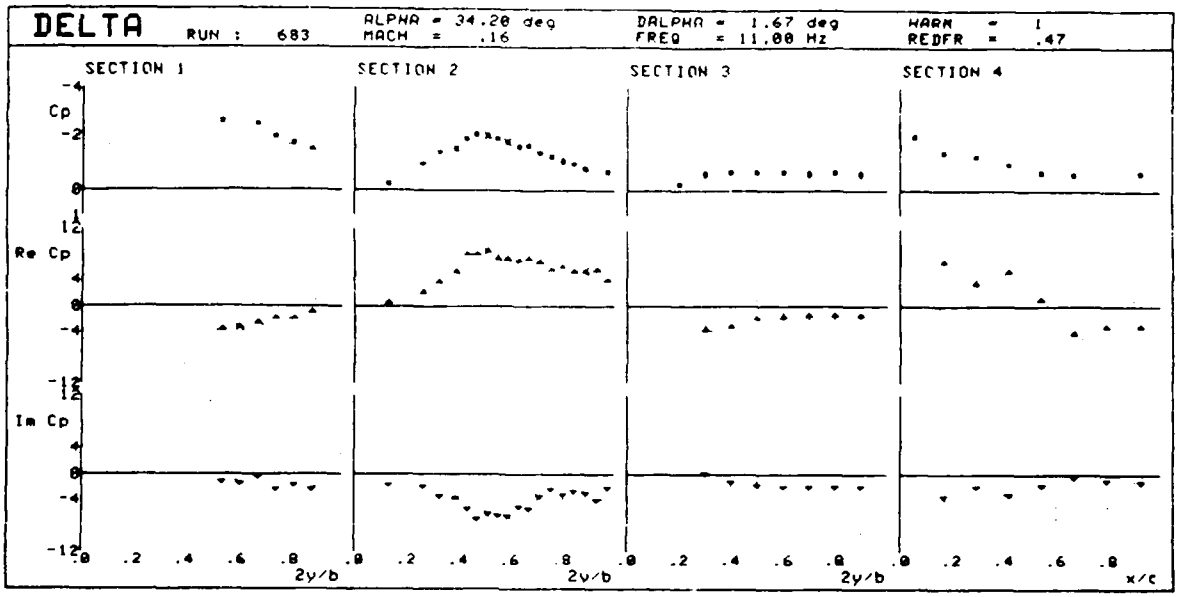
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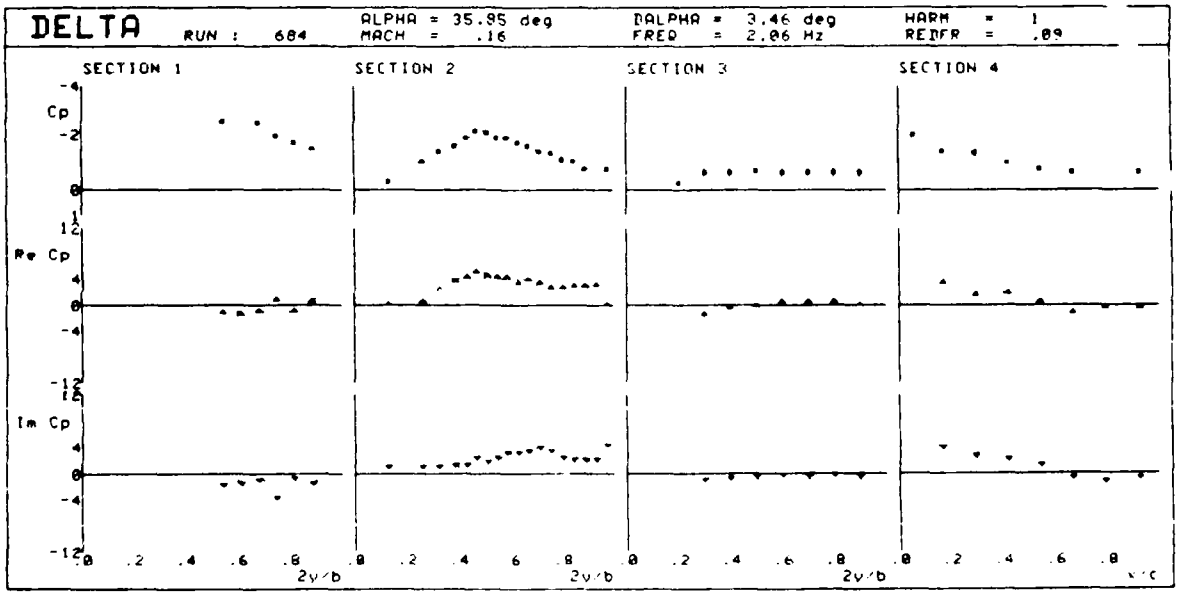
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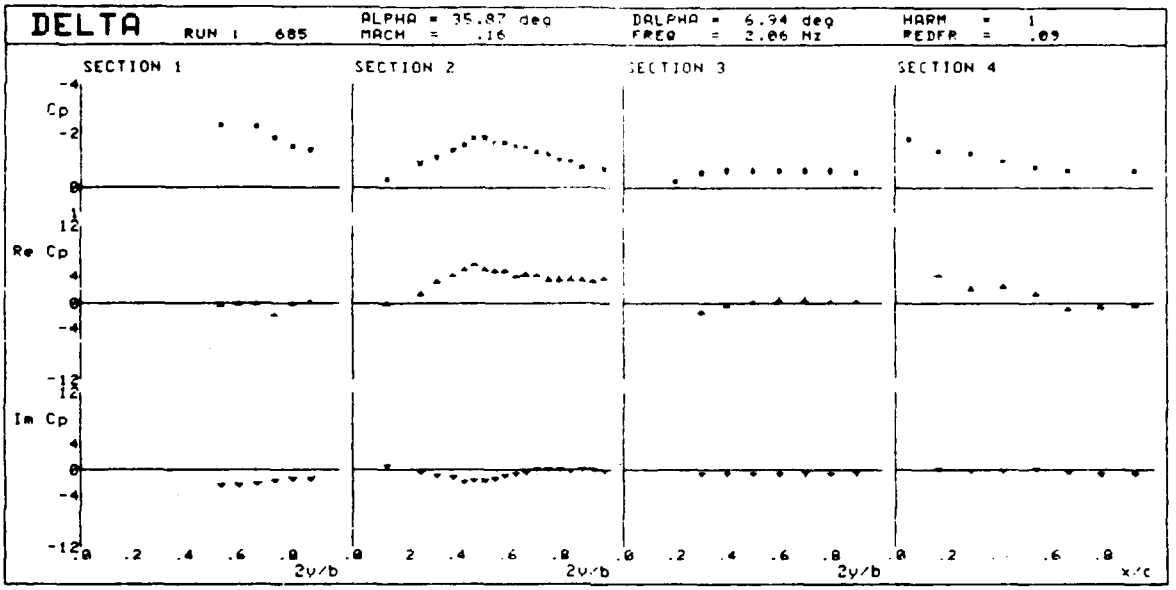
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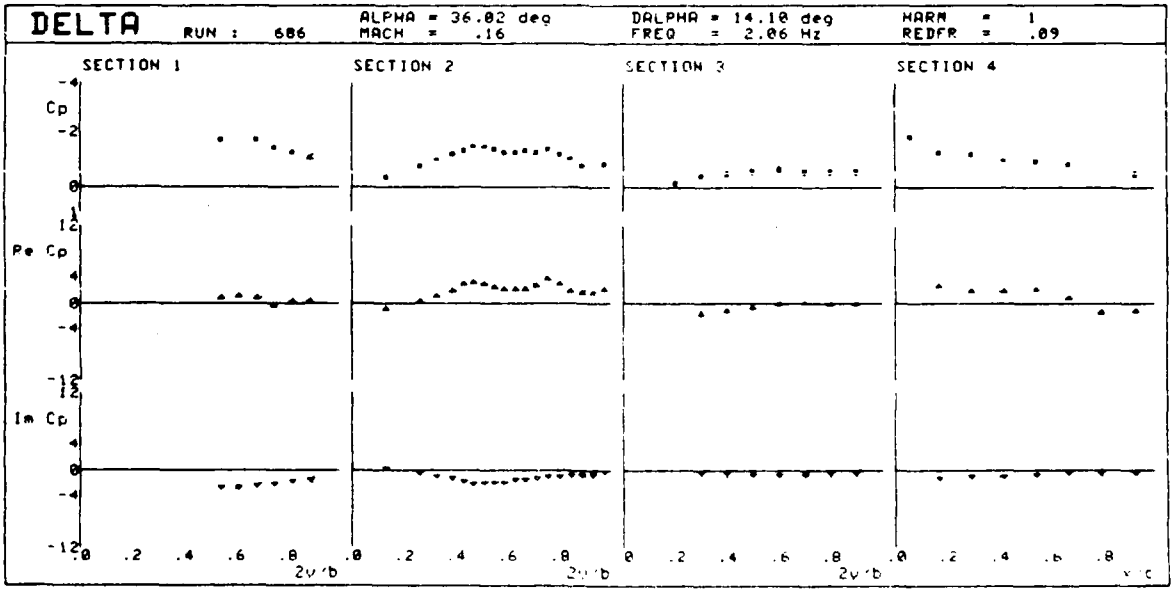
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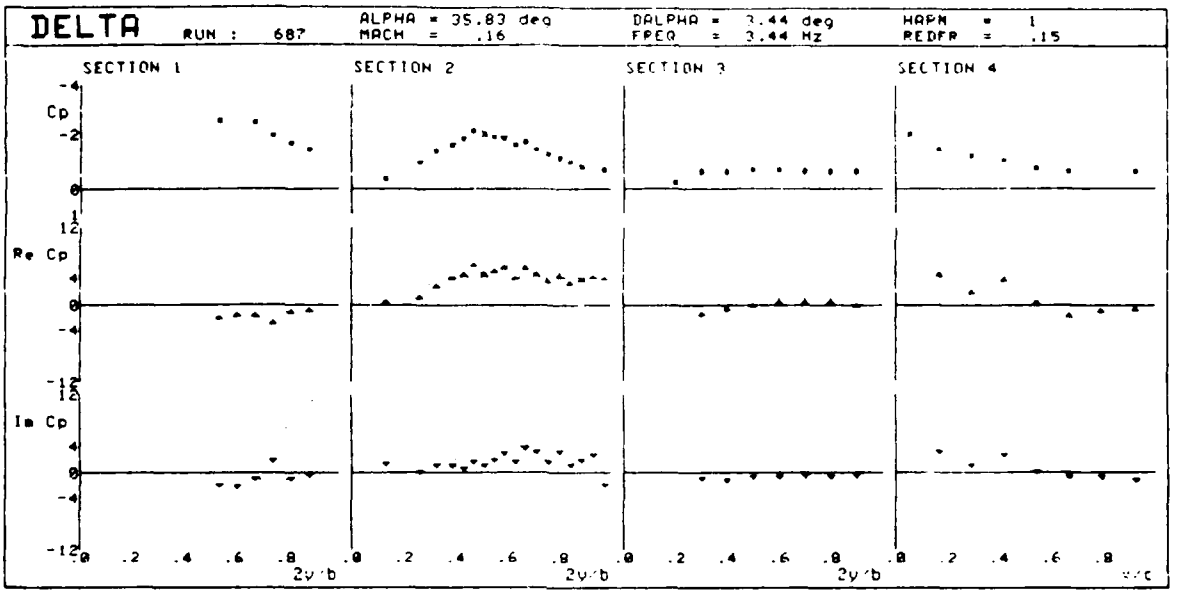
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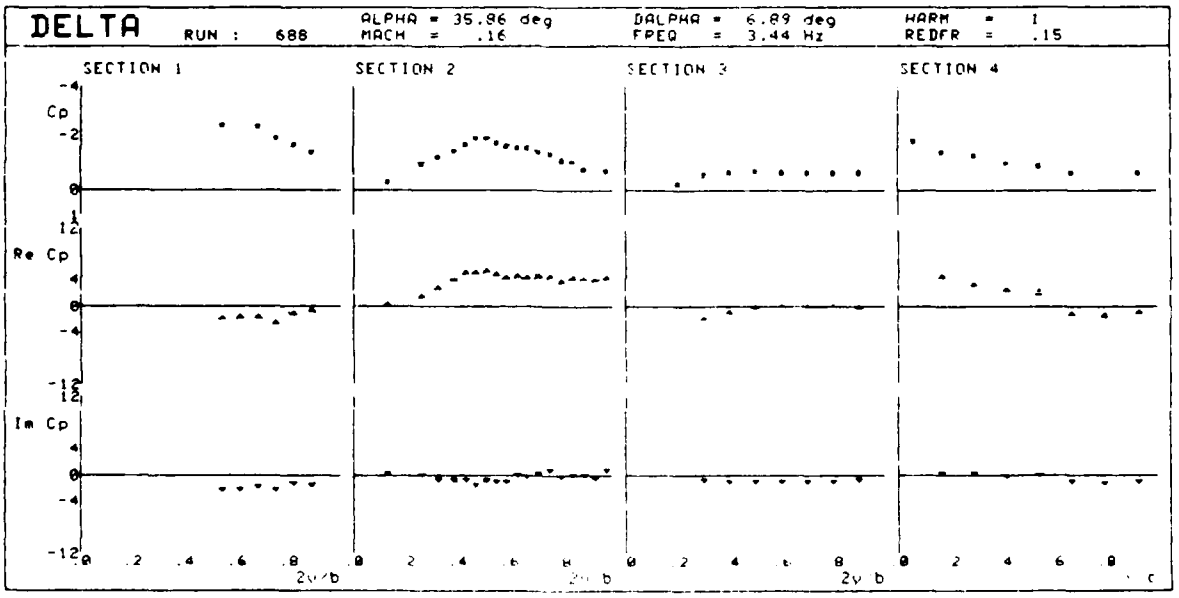
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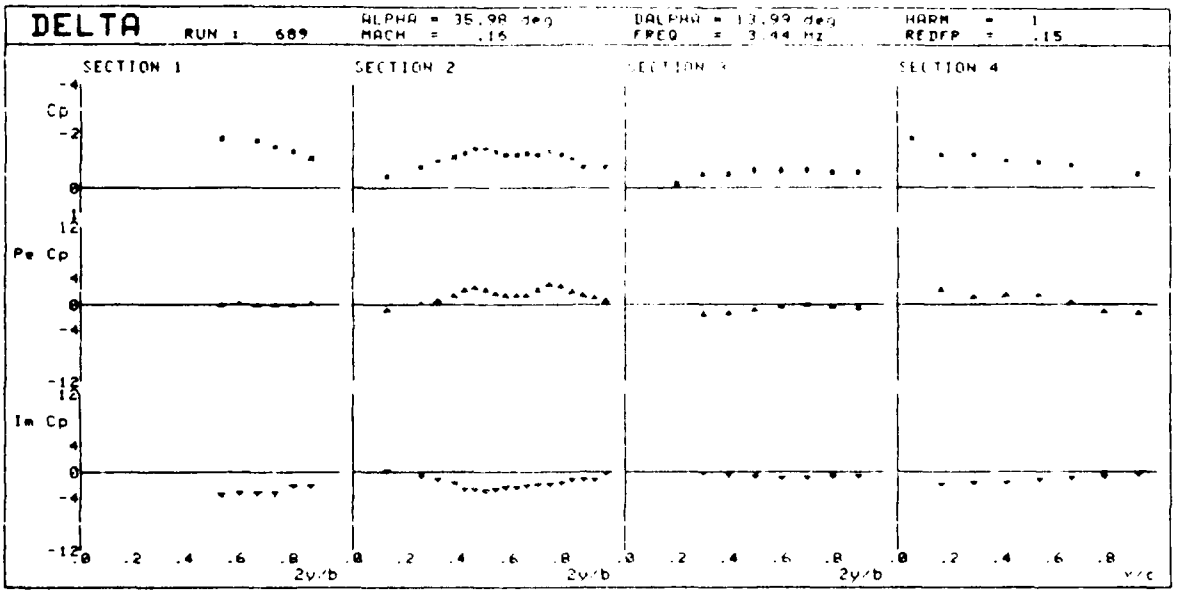
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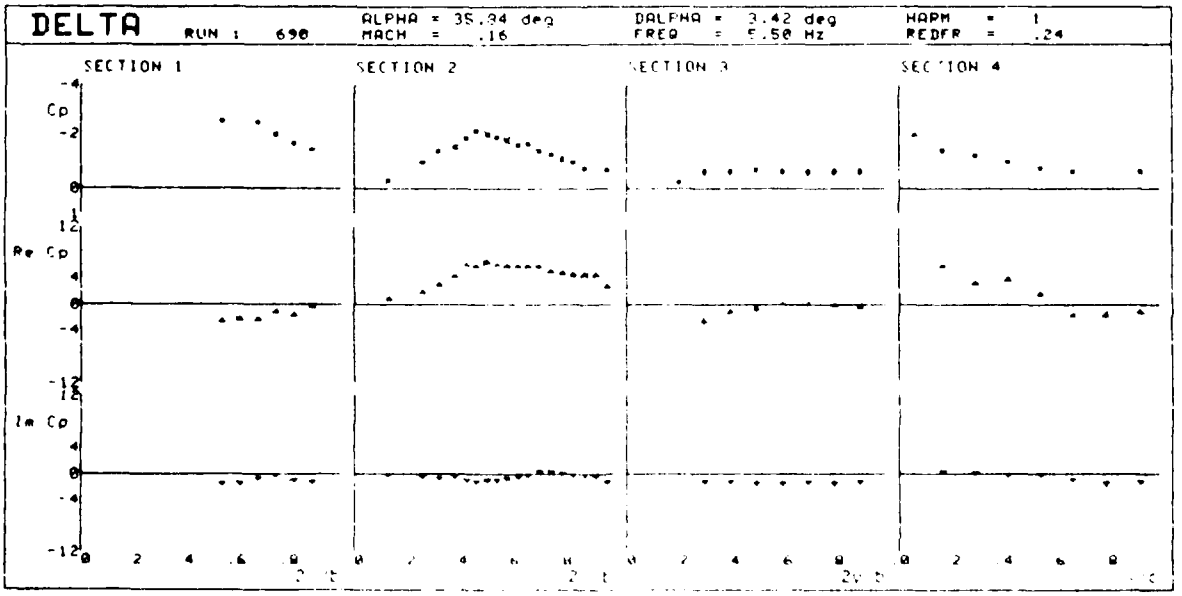
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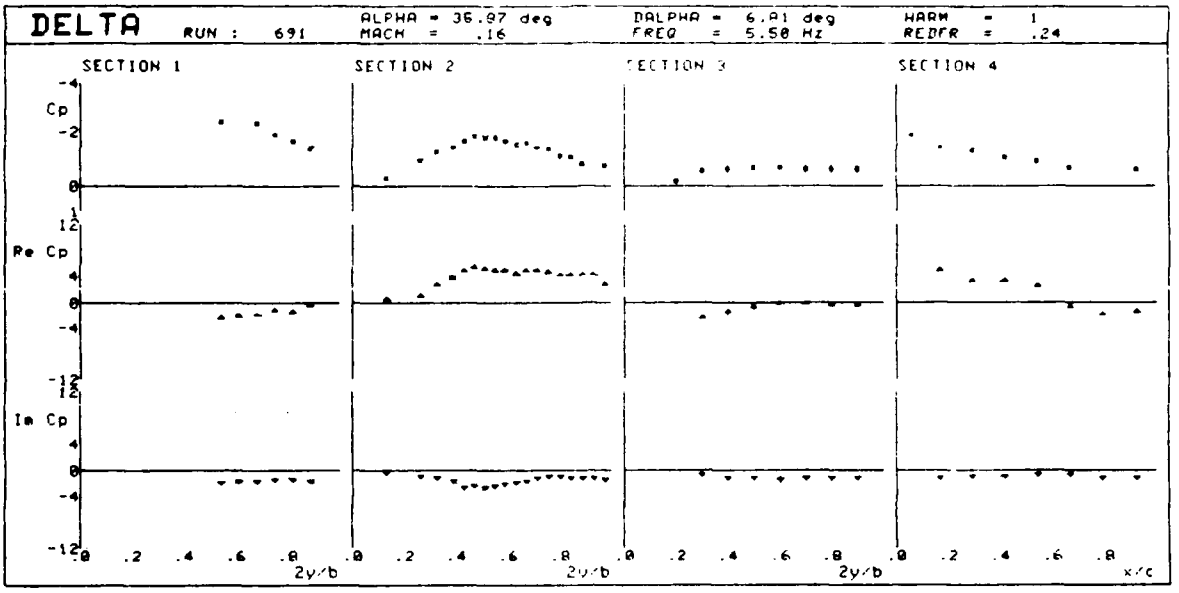
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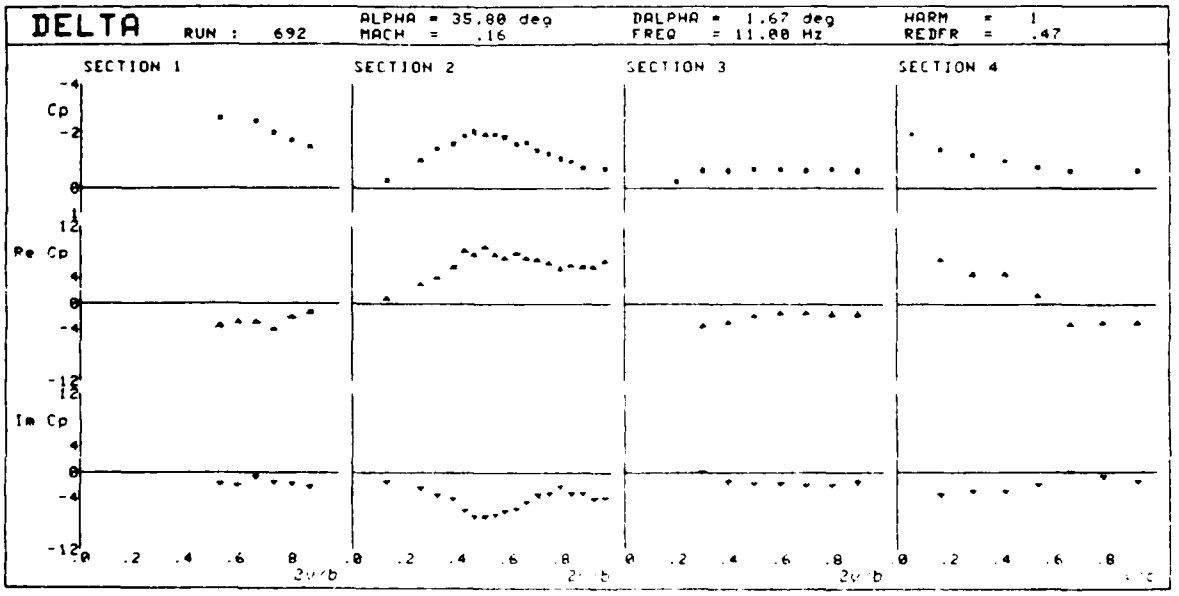
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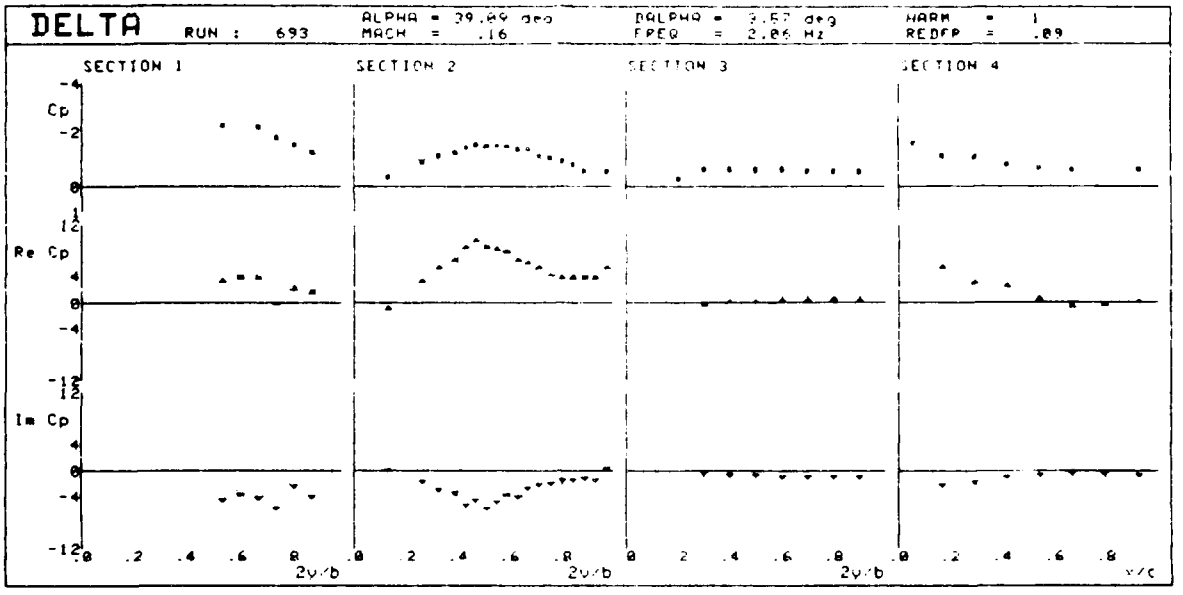
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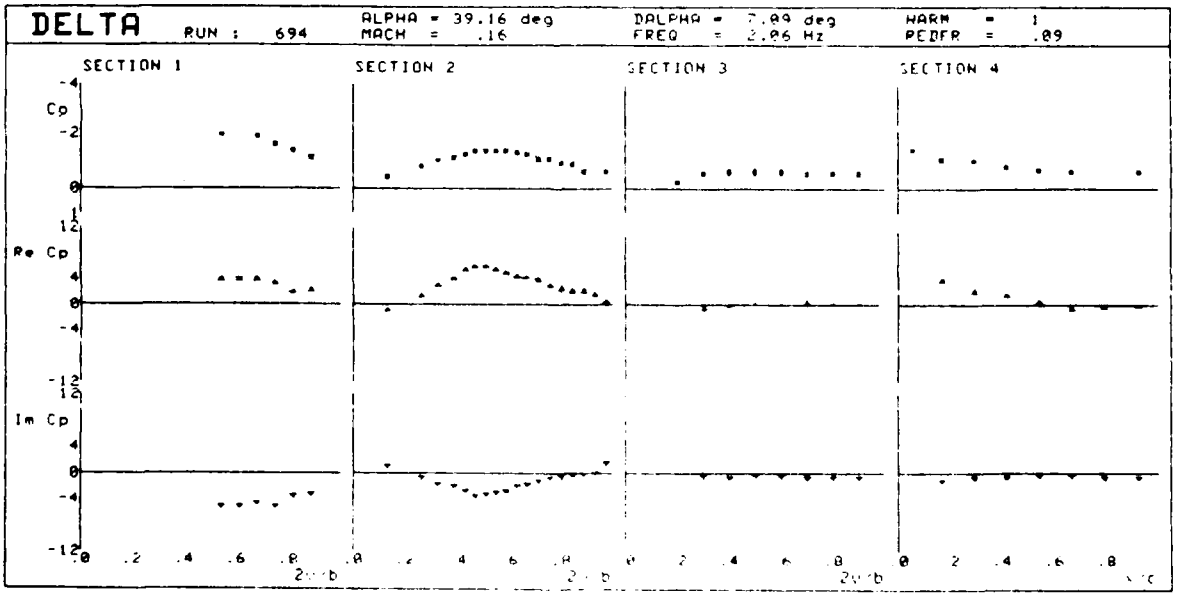
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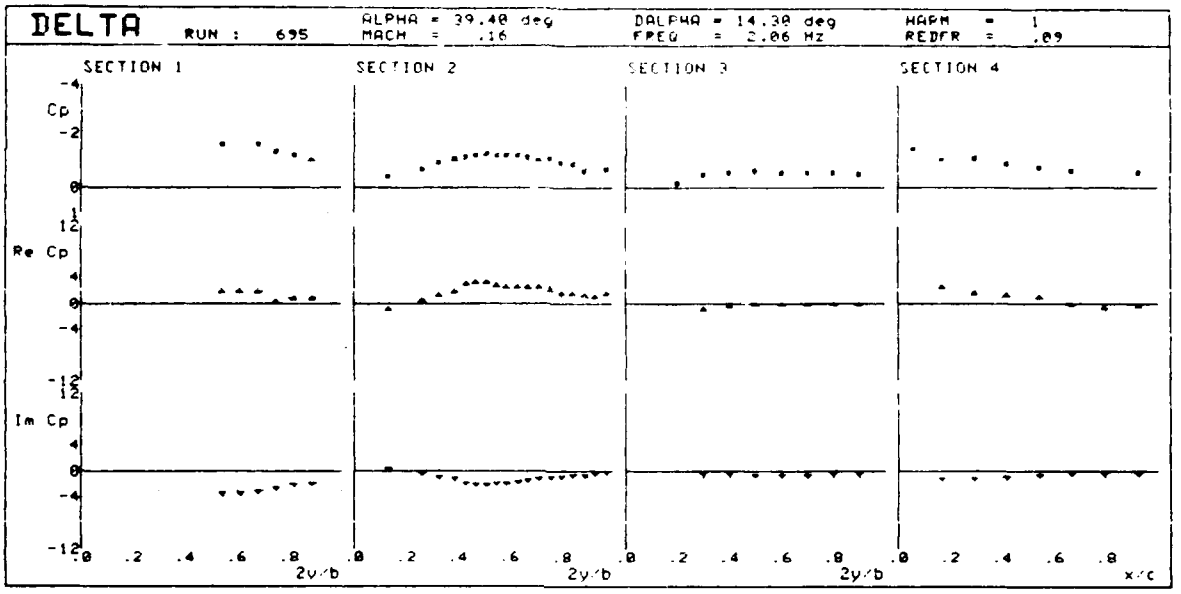
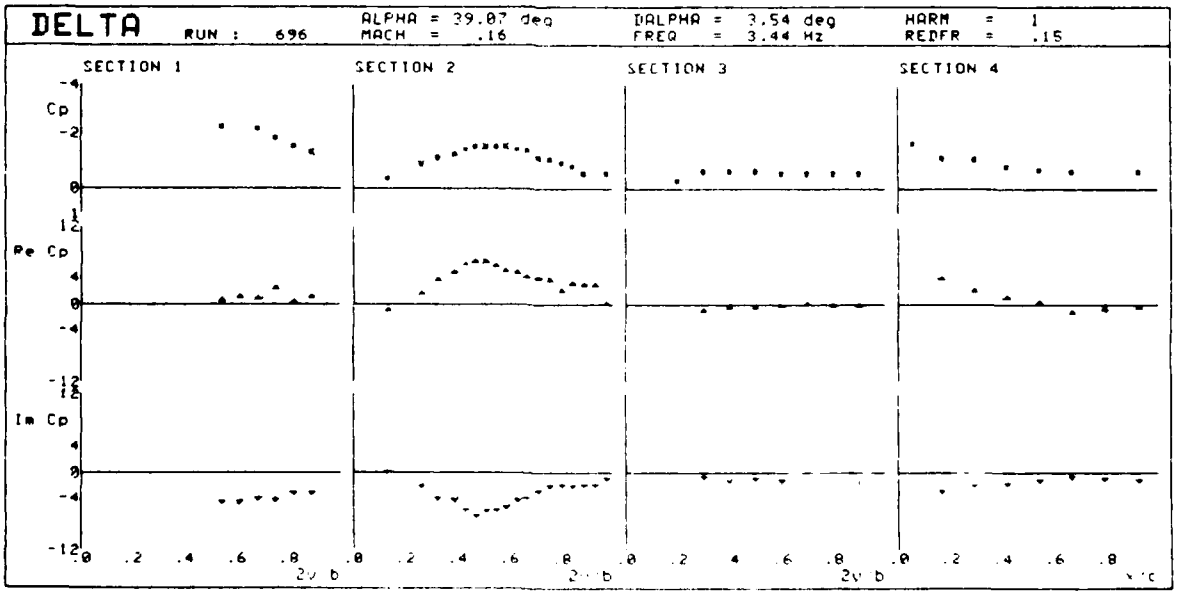
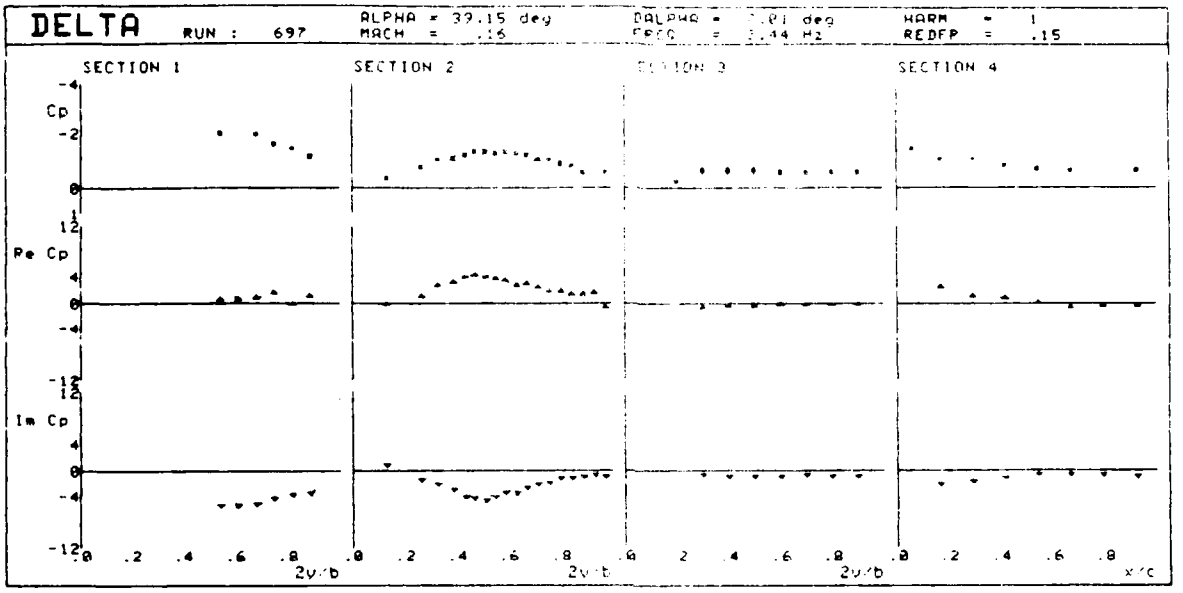
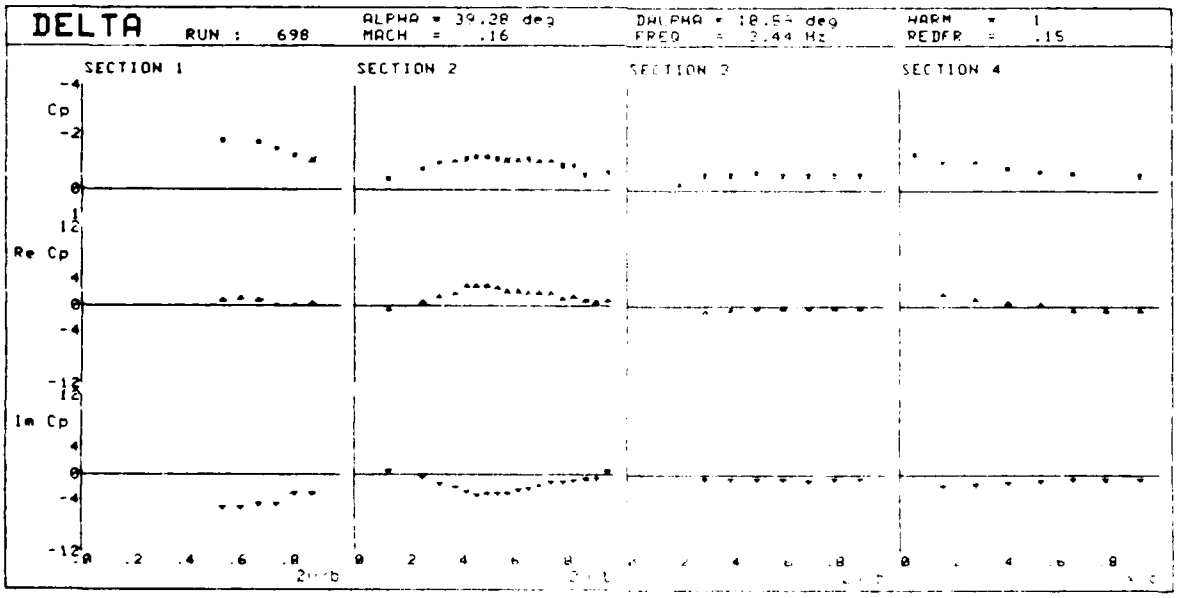
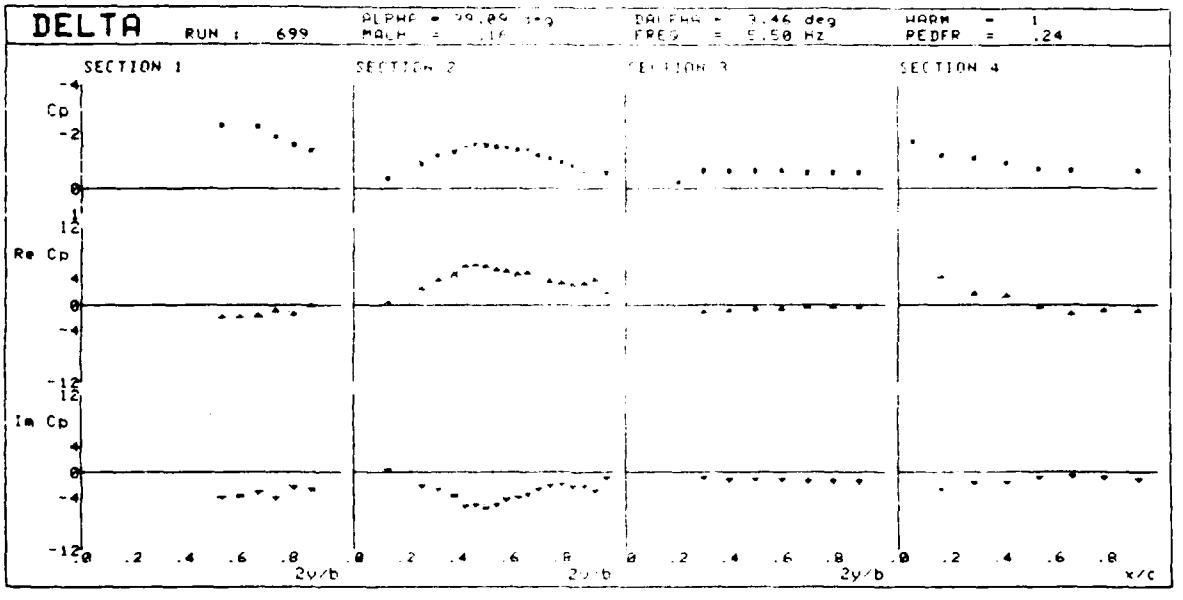
2y/b
x/c

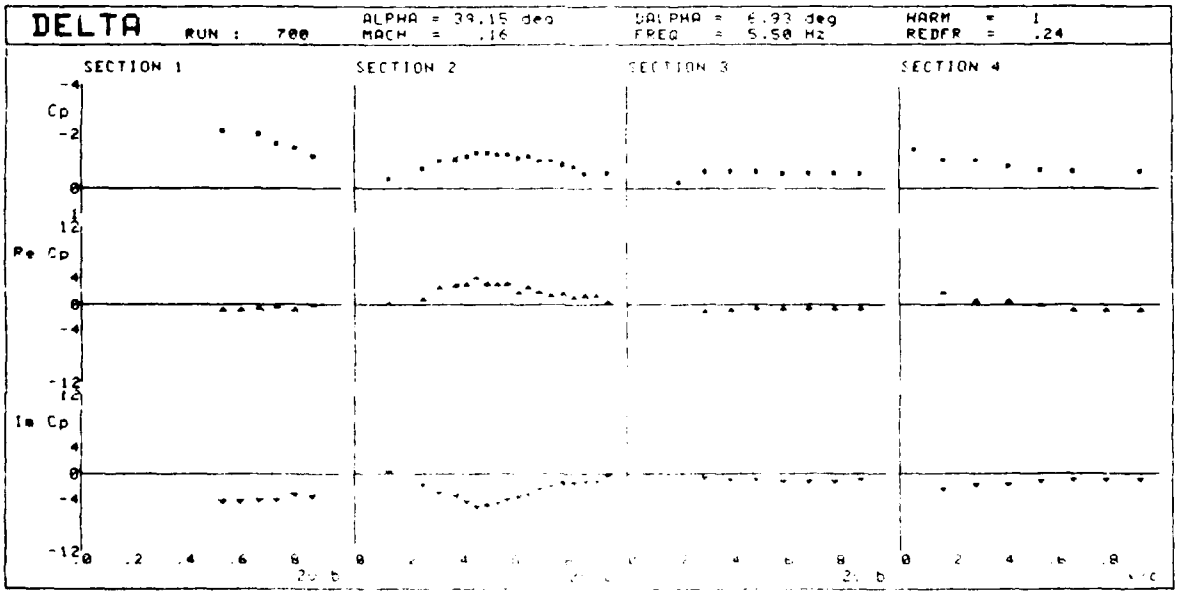

DELTA
RUN : 695
ALPHA = 39.48 deg
MACH = .16
DALPHA = 14.38 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

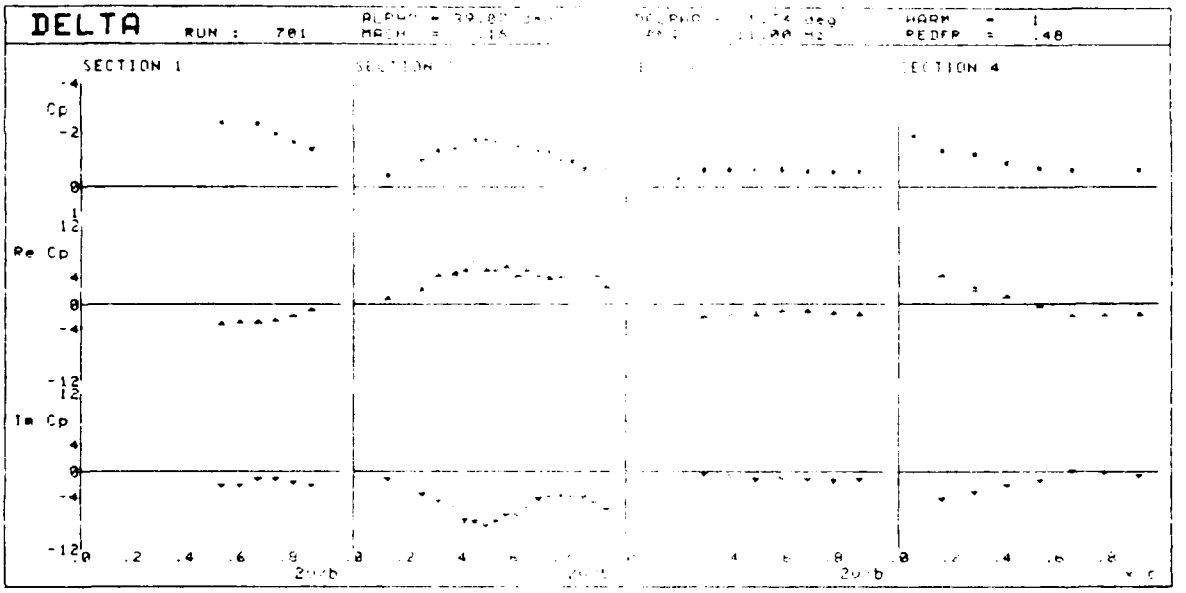

DELTA
RUN : 696
ALPHA = 39.87 deg
MACH = .16
DALPHA = 3.54 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

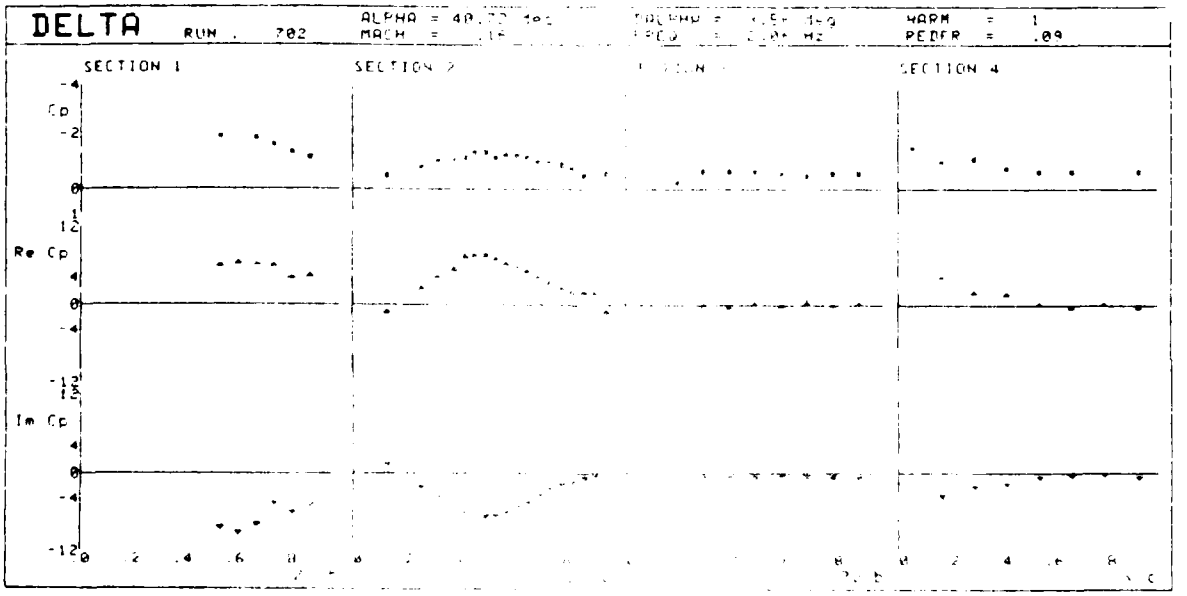

DELTA
RUN : 697
ALPHA = 39.15 deg
MACH = .16
DALPHA = 3.81 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2v/b
x/c

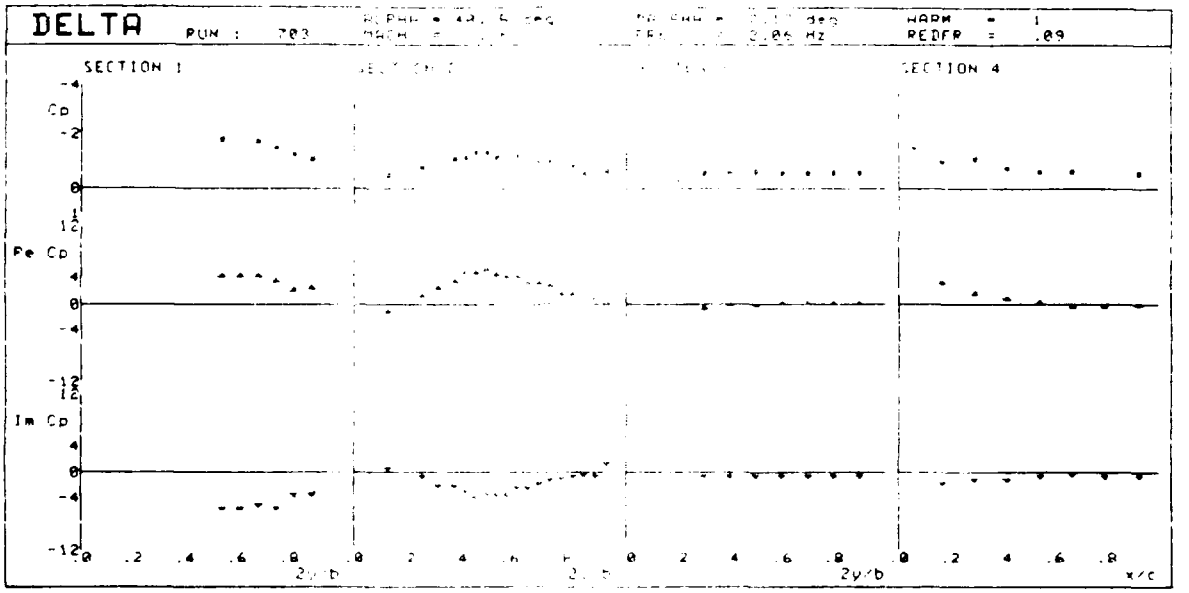

DELTA
RUN : 698
ALPHA = 39.28 deg
MACH = .16
DALPHA = 18.54 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2v/b

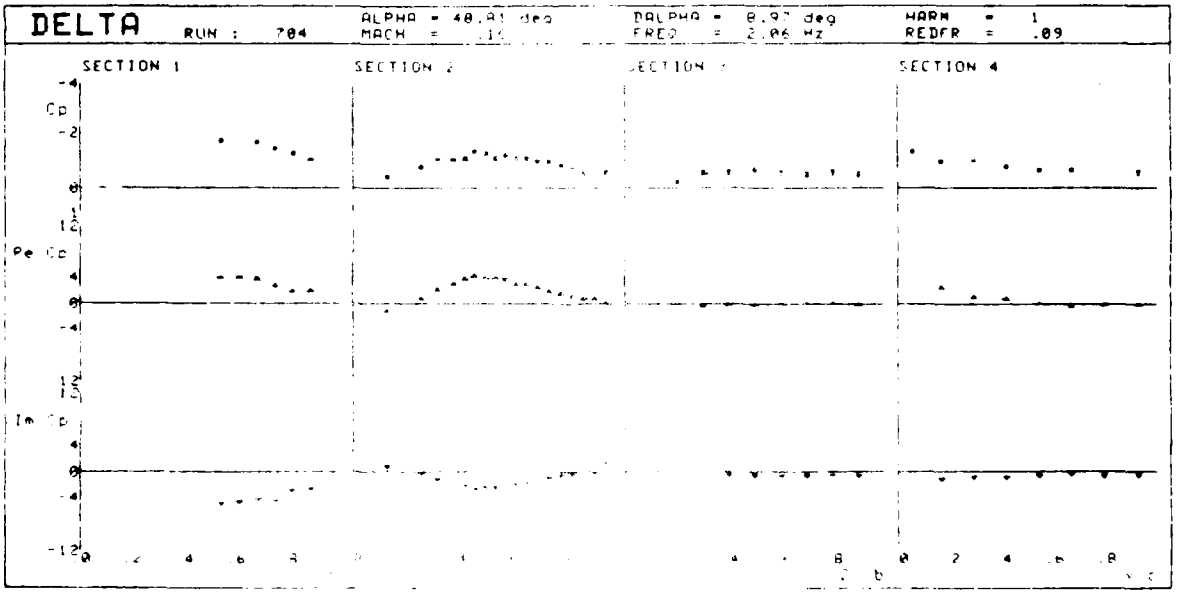

DELTA
RUN : 699
ALPHA = 39.09 deg
MACH = .16
DALPHA = 3.46 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

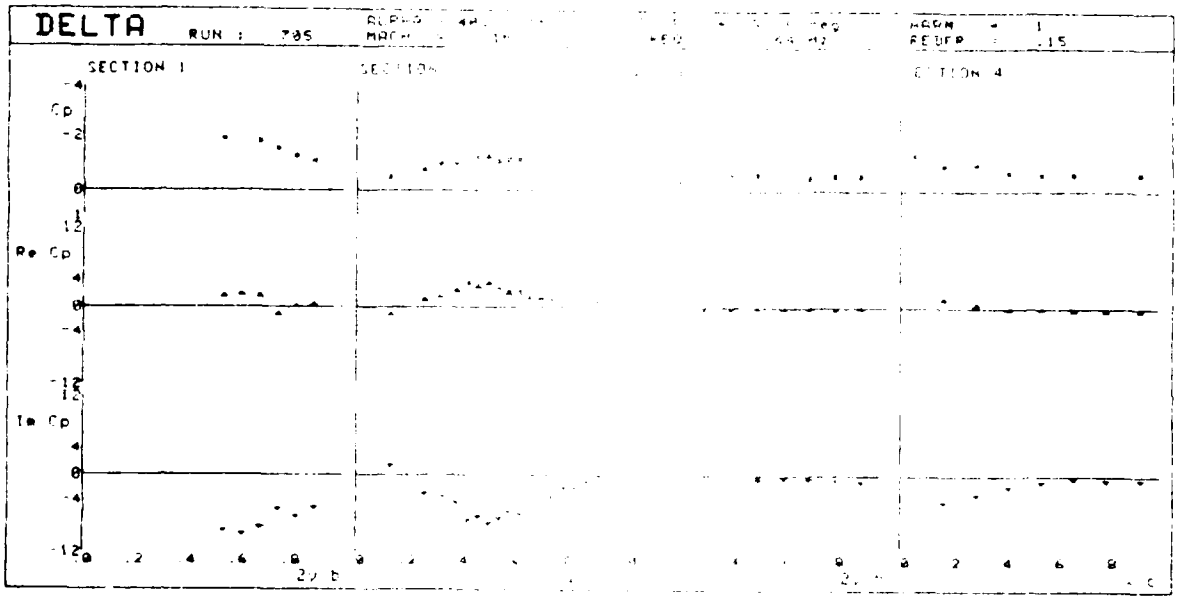

DELTA
RUN : 700
ALPHA = 39.15 deg
MACH = .16
DALPHA = 6.93 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

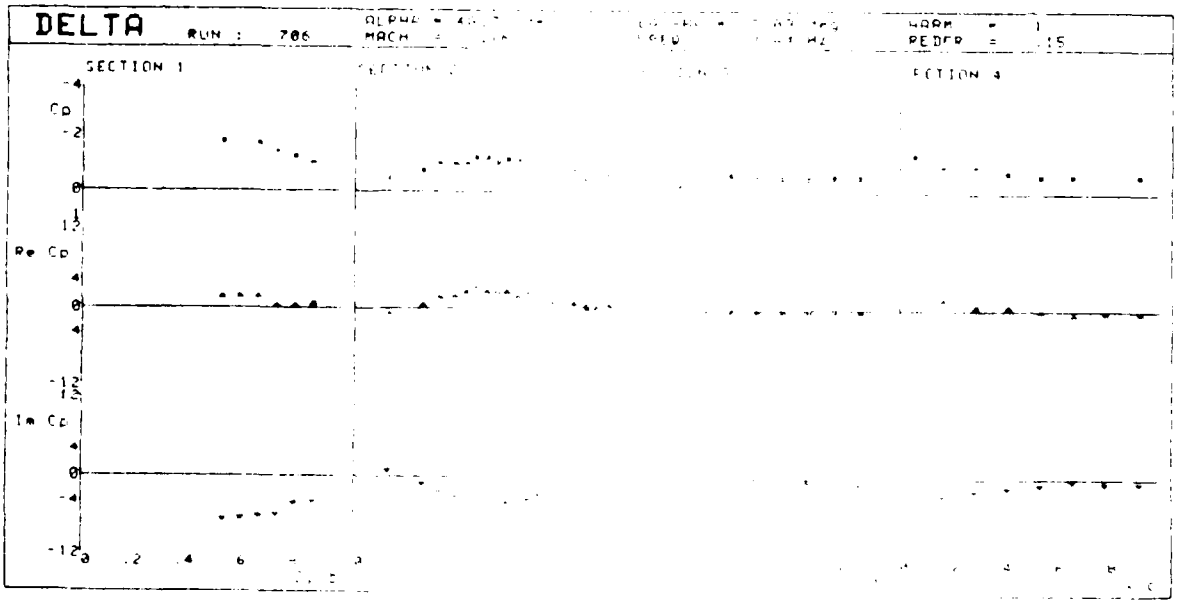

DELTA
RUN : 701
HARM = 1
PEDFR = .48
SECTION 1
SECTION 4
Cp
Re Cp
Im Cp
2x/b

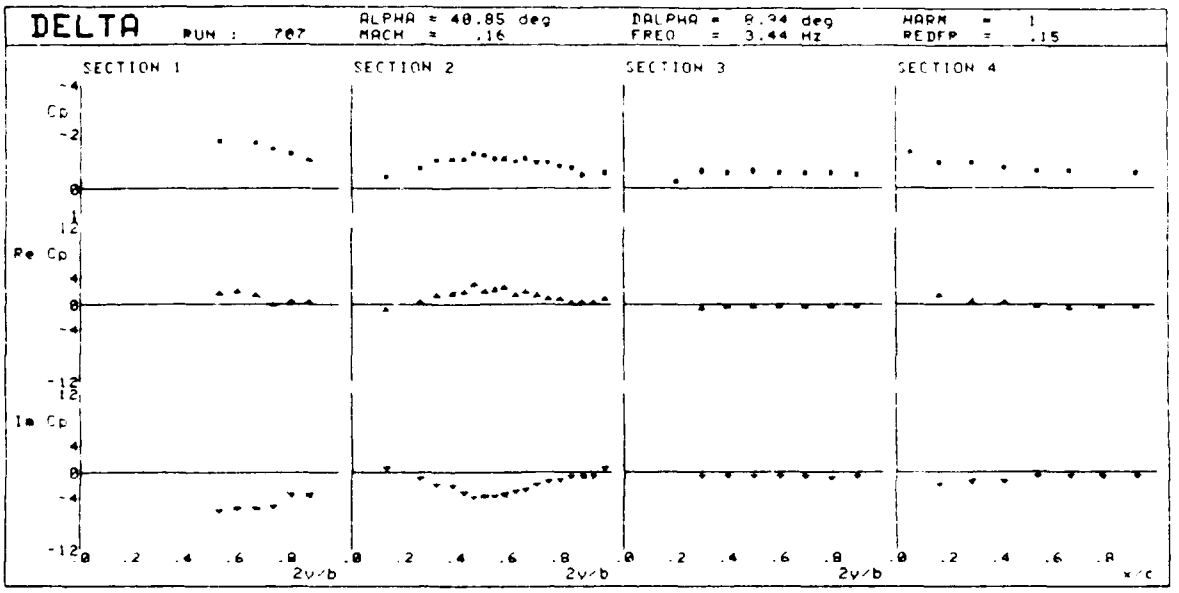

DELTA
RUN : 702
HARM = 1
PEDFR = .09
SECTION 1
SECTION 4
Cp
Re Cp
Im Cp

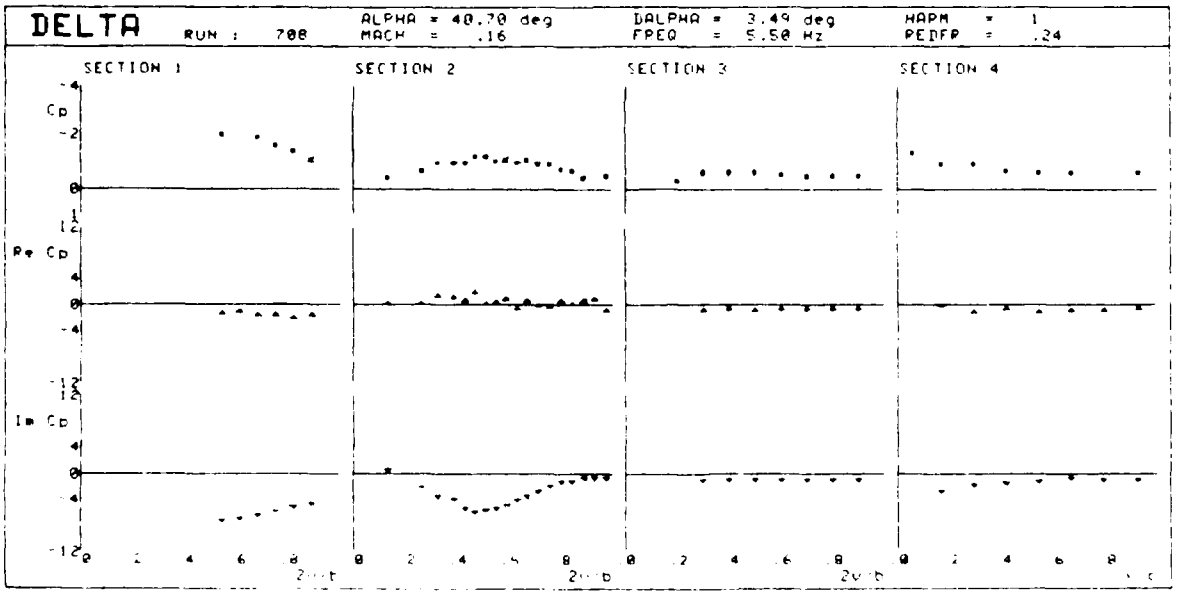

DELTA
RUN : 703
HARM = 1
REDFR = .09
SECTION 1
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

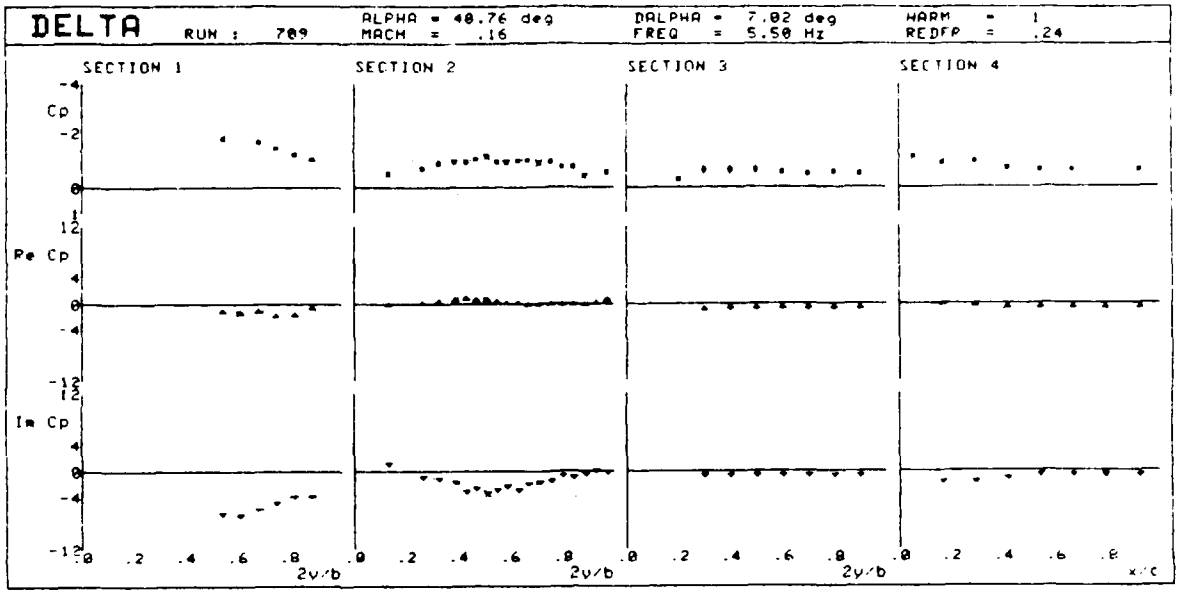

DELTA
RUN : 704
ALPHA = 40.81 deg
MACH = .11
DALPHA = 8.97 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 4
Cp
Re Cp
Im Cp

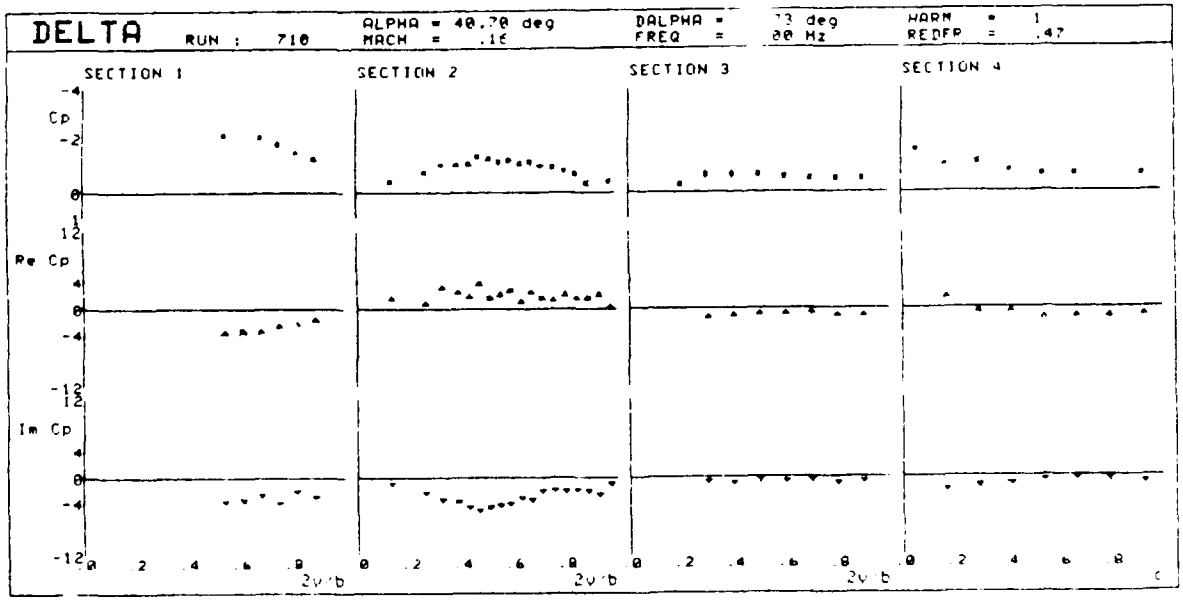

DELTA
RUN : 705
SECTION 1
Cp
Re Cp
Im Cp

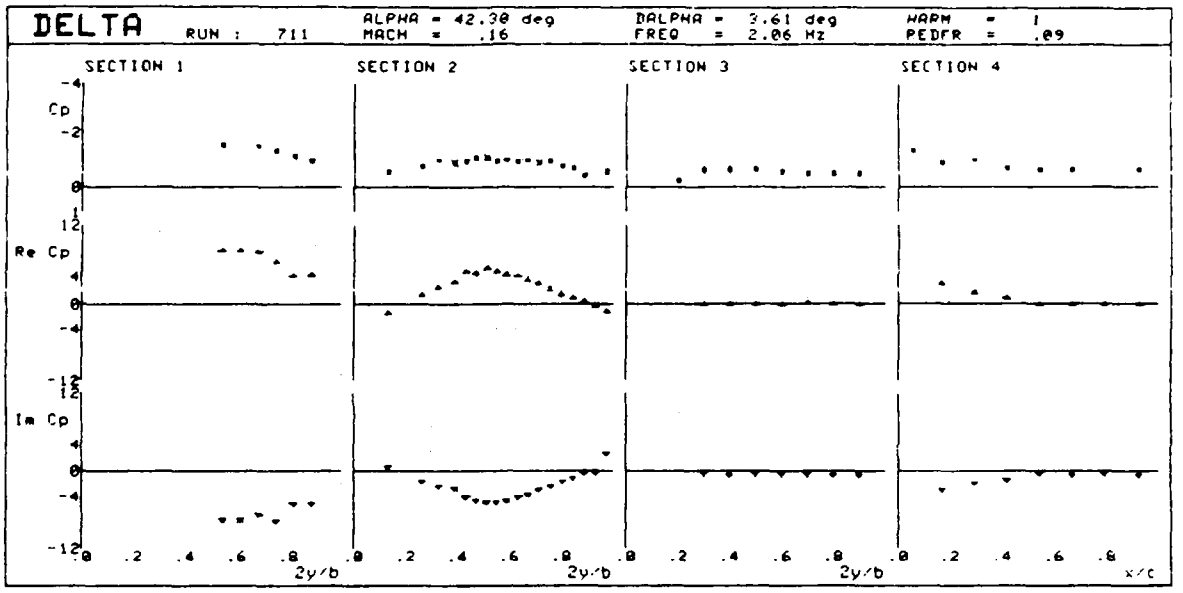

DELTA
RUN : 706
SECTION 1
Cp
Re Cp
Im Cp

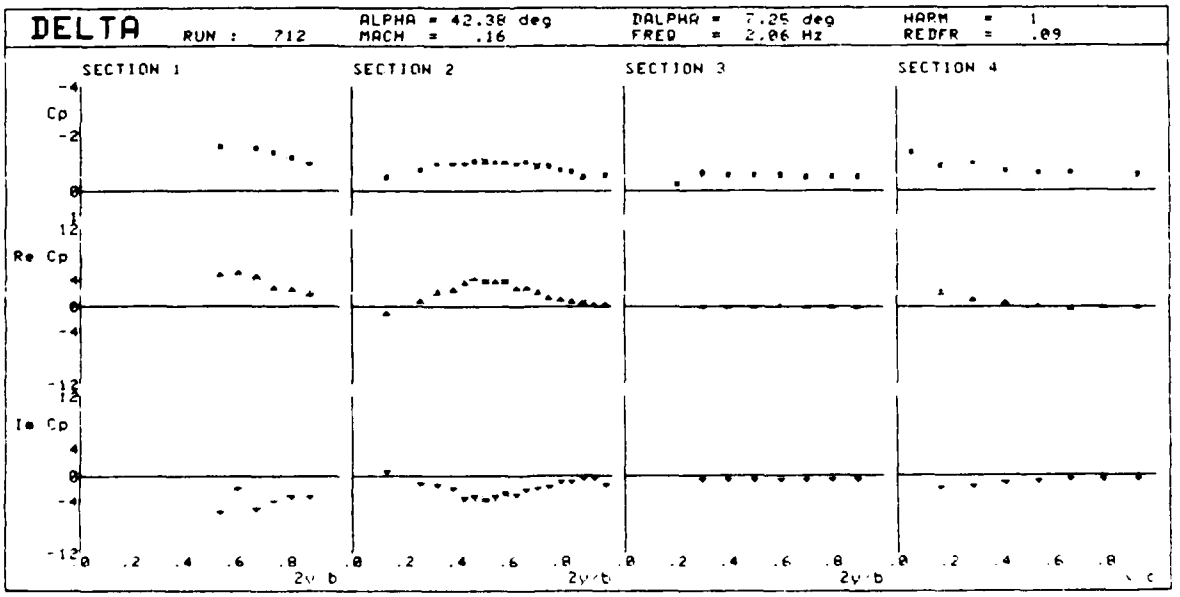

DELTA
RUN : 707
ALPHA = 40.85 deg
MACH = .16
DALPHA = 8.94 deg
FREQ = 3.44 Hz
HARM = 1
REDFP = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

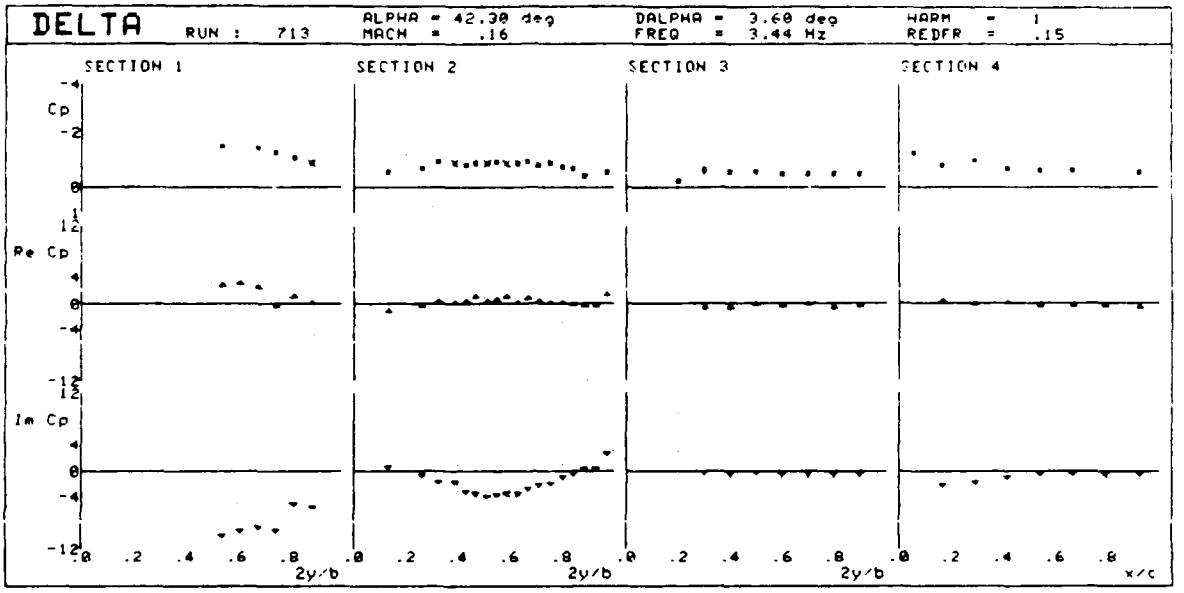

DELTA
RUN : 708
ALPHA = 40.70 deg
MACH = .16
DALPHA = 3.49 deg
FREQ = 5.50 Hz
HARM = 1
REDFP = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

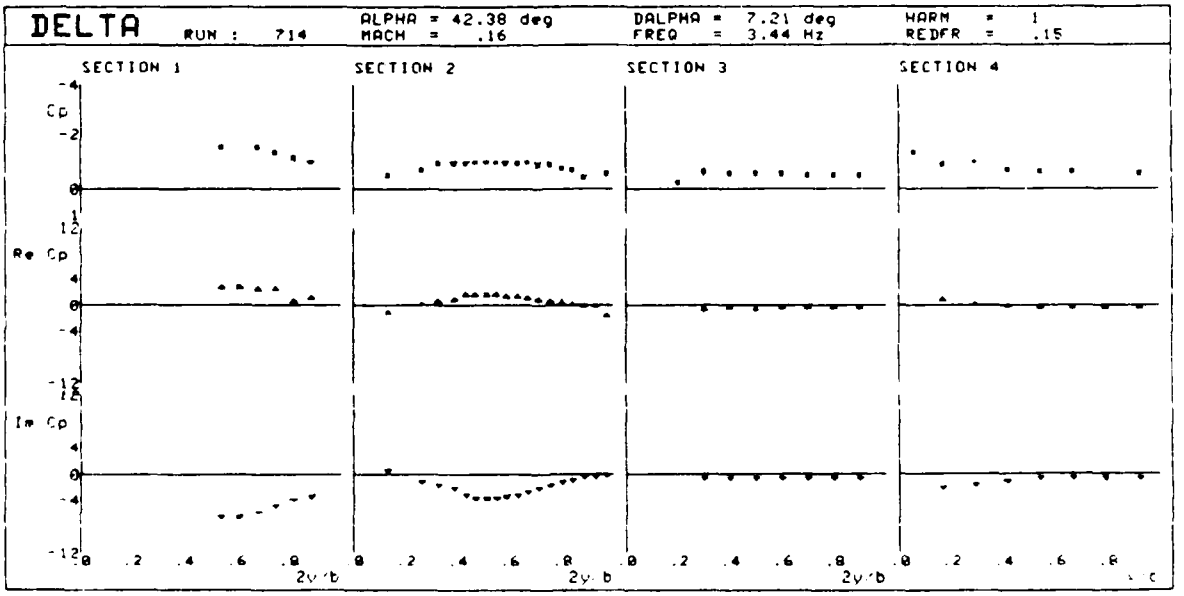

DELTA
RUN : 709
ALPHA = 40.76 deg
MACH = .16
DALPHA = 7.02 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

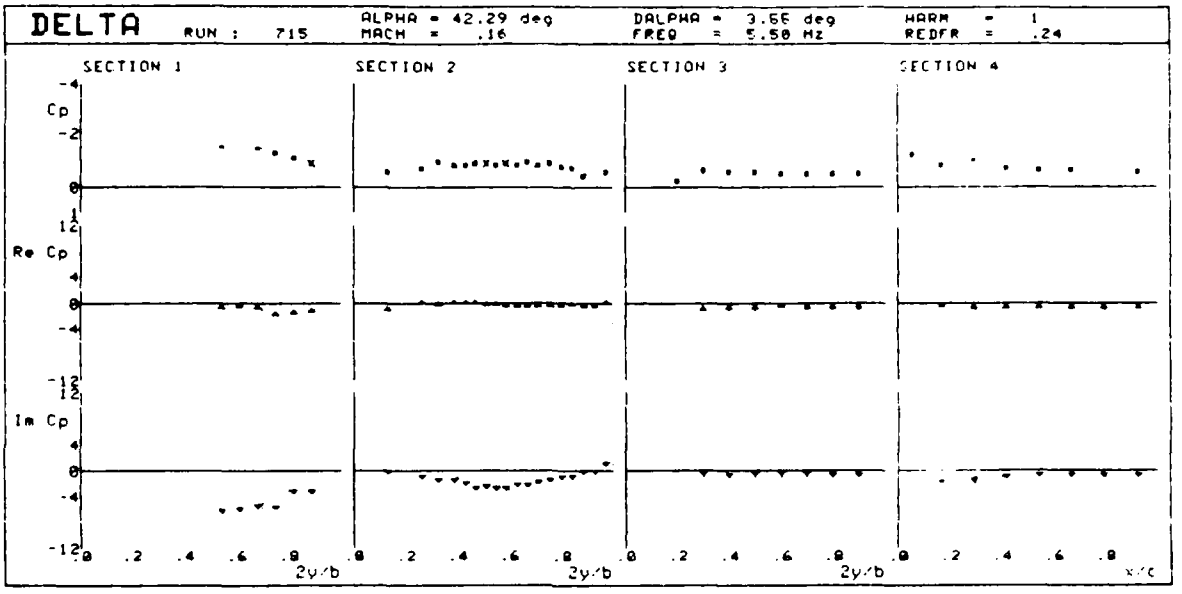

DELTA
RUN : 710
ALPHA = 40.78 deg
MACH = .16
DALPHA =
FREQ =
HARM = 1
REDFR = .47
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

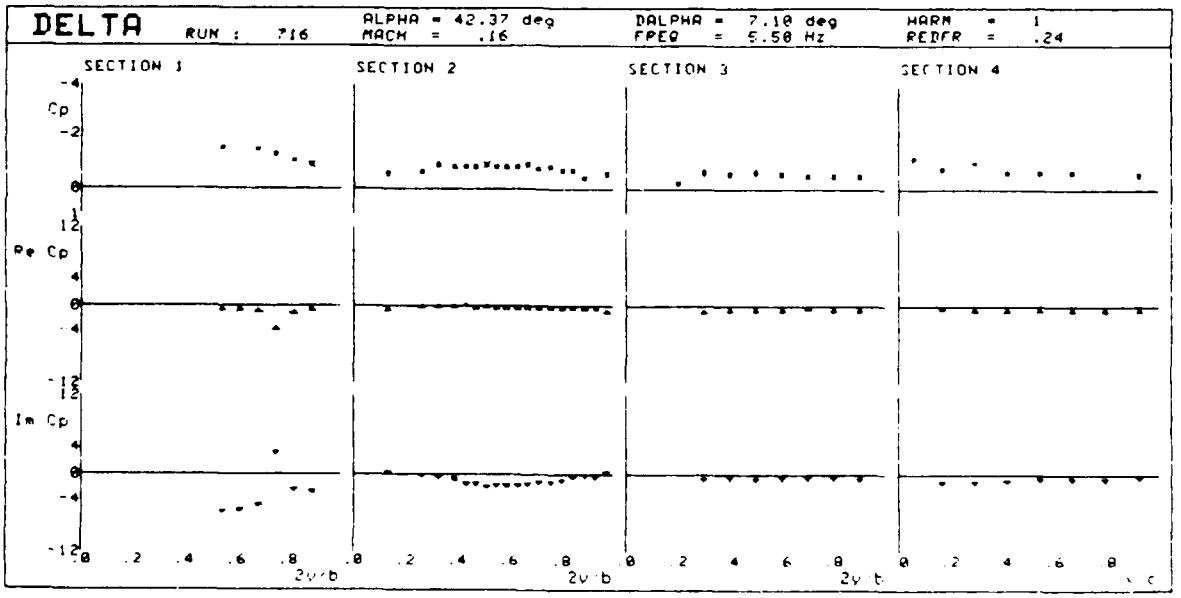

DELTA
RUN : 711
ALPHA = 42.38 deg
MACH = .16
DALPHA = 3.61 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

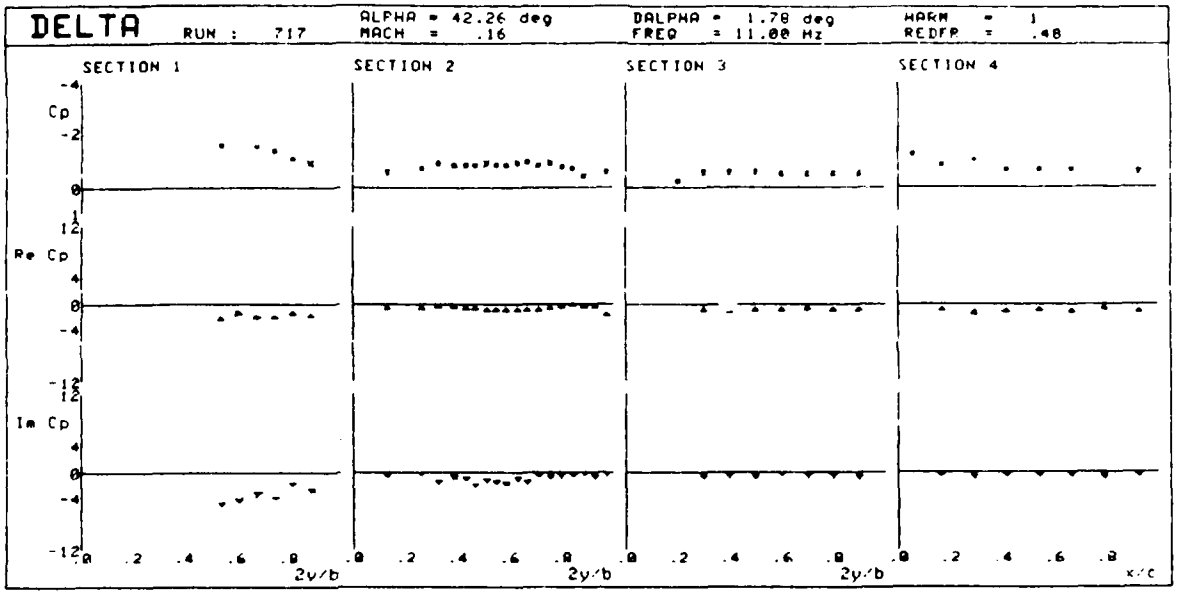

DELTA
RUN : 712
ALPHA = 42.38 deg
MACH = .16
DALPHA = 7.25 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

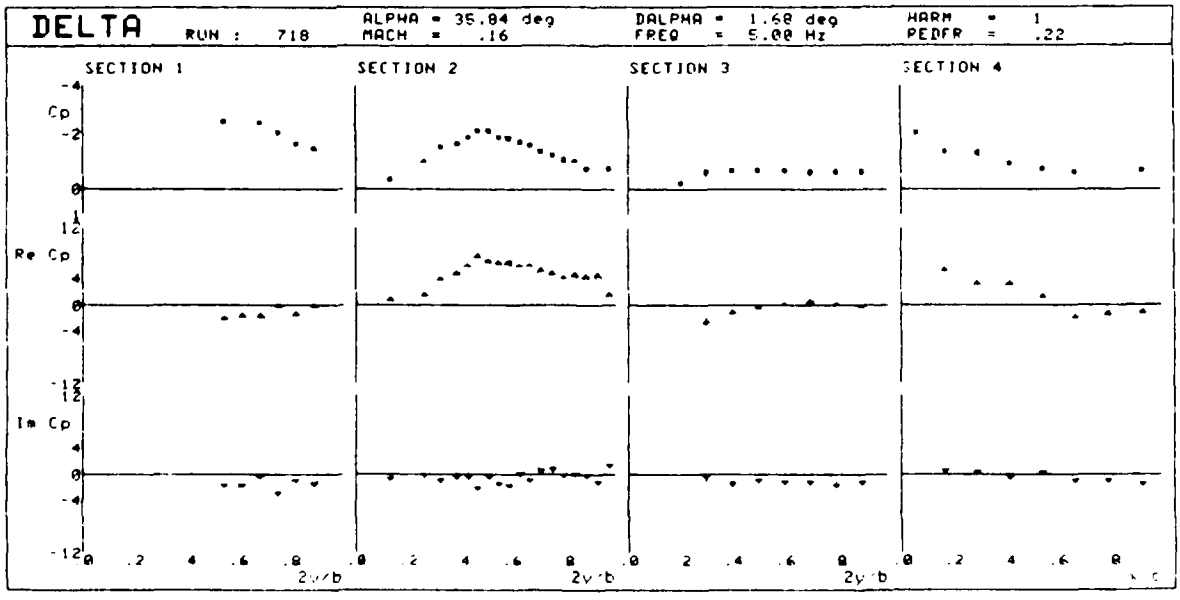

DELTA
RUN : 713
ALPHA = 42.30 deg
MACH = .16
DALPHA = 3.60 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

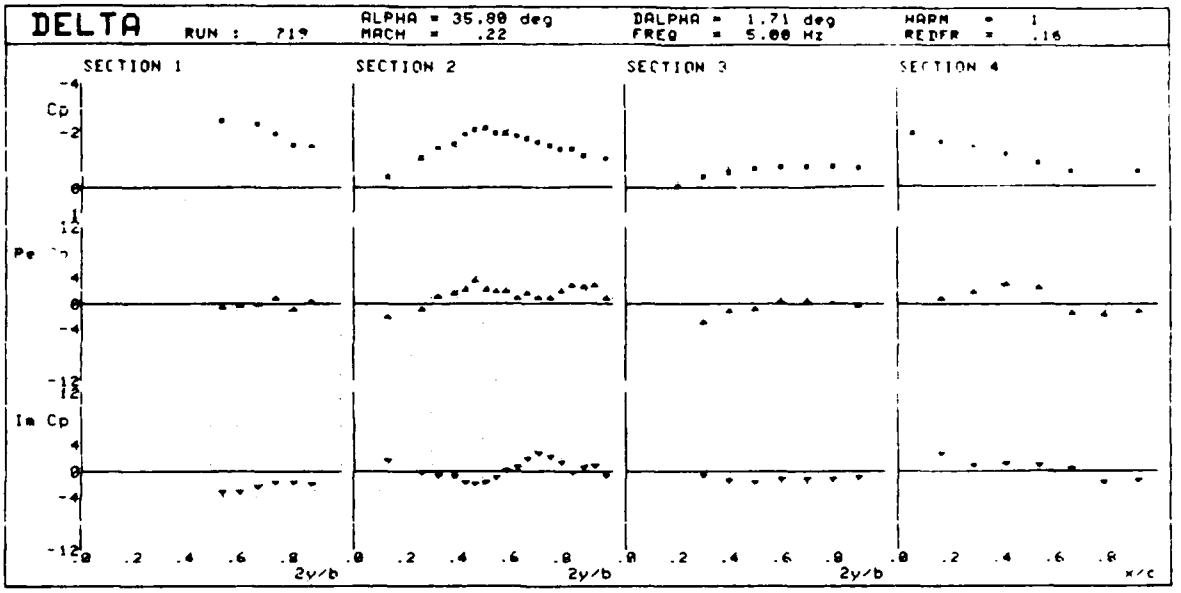

DELTA
RUN : 714
ALPHA = 42.38 deg
MACH = .16
DALPHA = 7.21 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

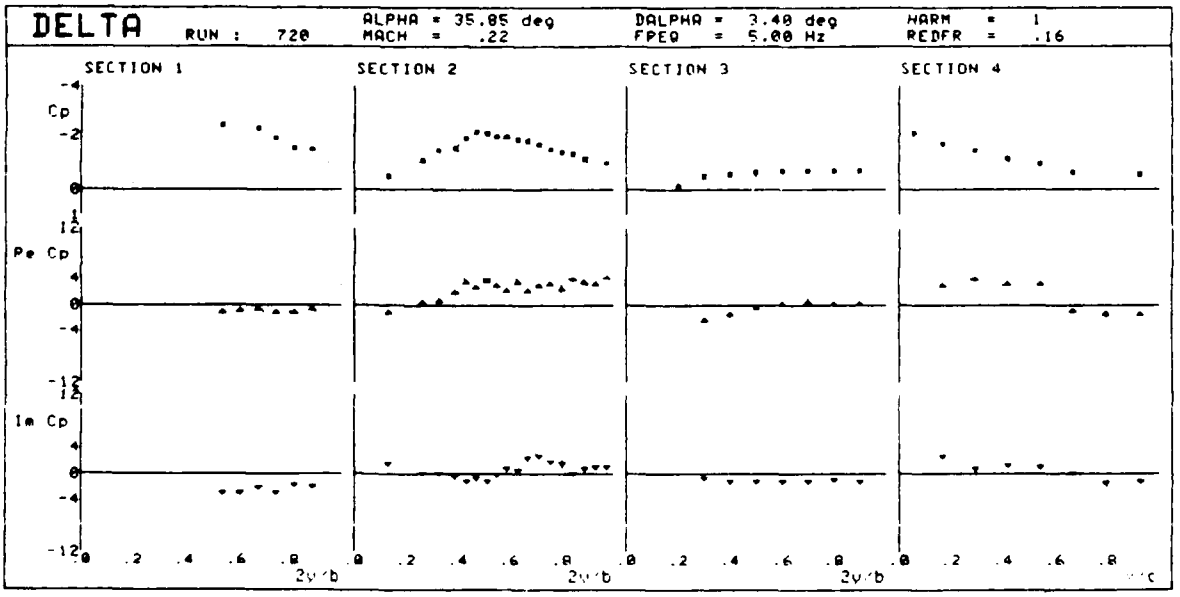

DELTA
RUN : 715
ALPHA = 42.29 deg
MACH = .16
DALPHA = 3.65 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

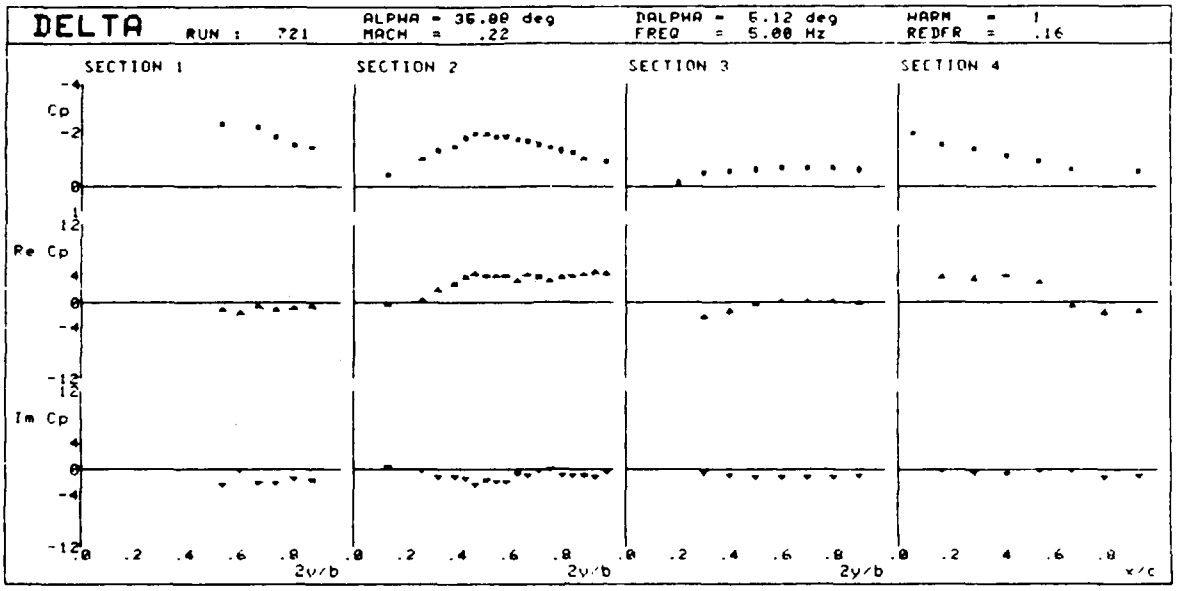

DELTA
RUN : 716
ALPHA = 42.37 deg
MACH = .16
DALPHA = 7.10 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

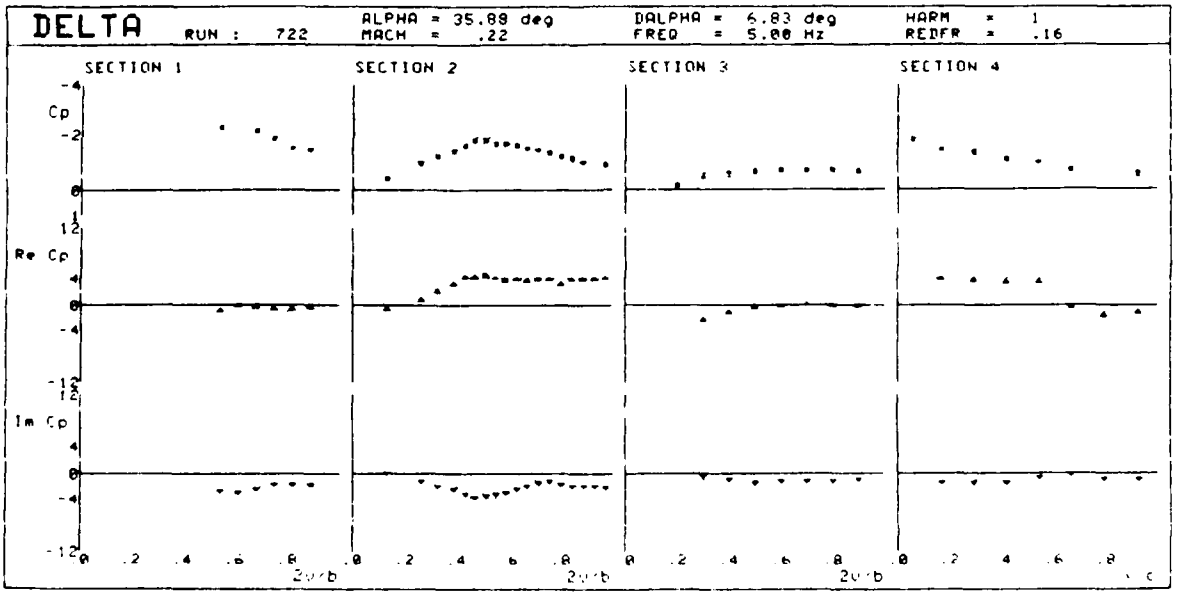

DELTA
RUN : 717
ALPHA = 42.26 deg
MACH = .16
DALPHA = 1.78 deg
FREQ = 11.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

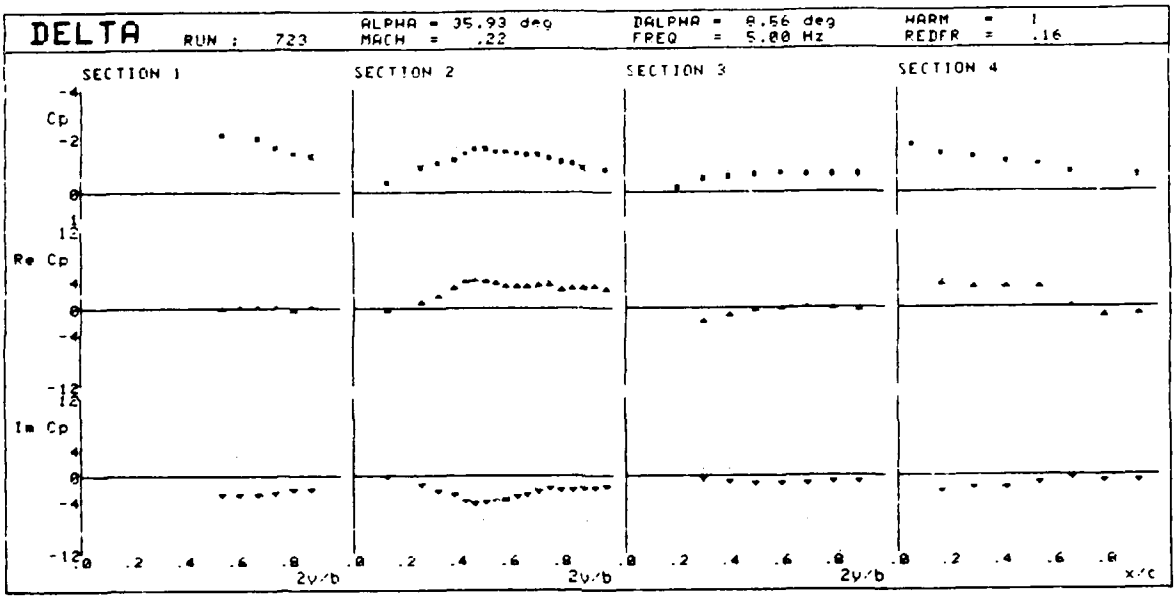

DELTA
RUN : 718
ALPHA = 35.84 deg
MACH = .16
DALPHA = 1.68 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .22
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

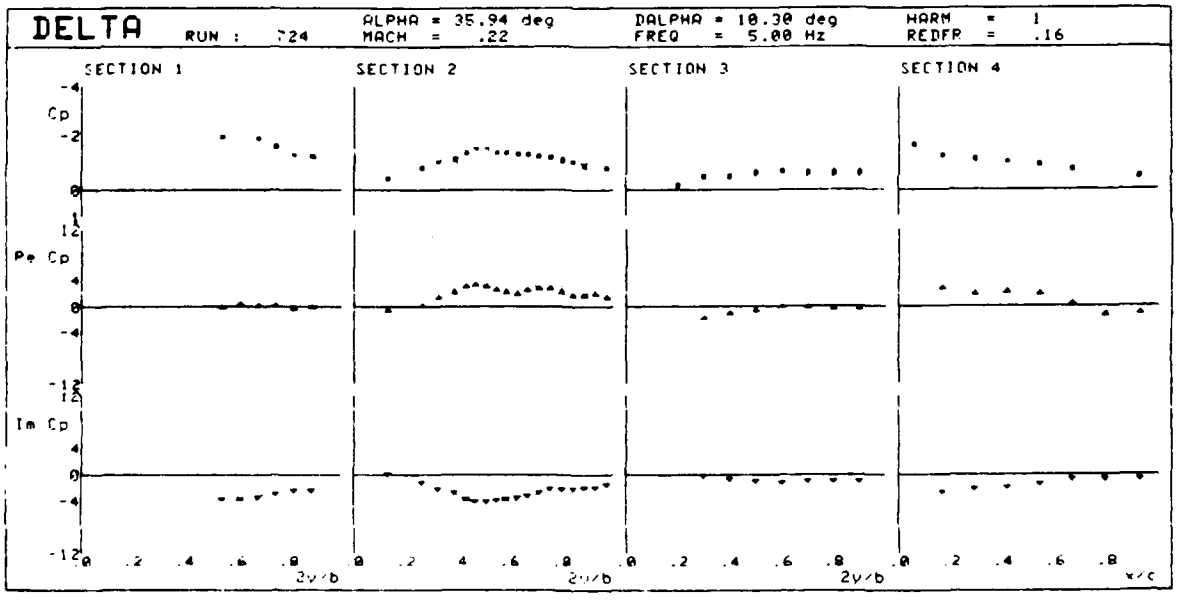

DELTA
RUN : 719
ALPHA = 35.80 deg
MACH = .22
DALPHA = 1.71 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Im Cp
2y/b
x/c

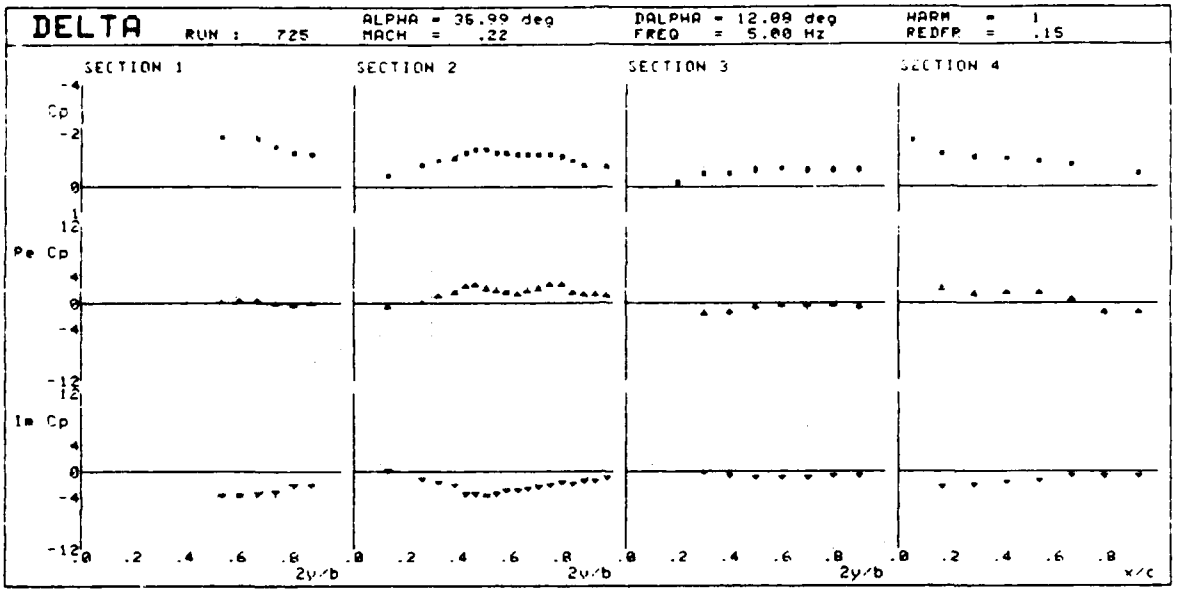

DELTA
RUN : 720
ALPHA = 35.85 deg
MACH = .22
DALPHA = 3.40 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Im Cp
2y/b
x/c

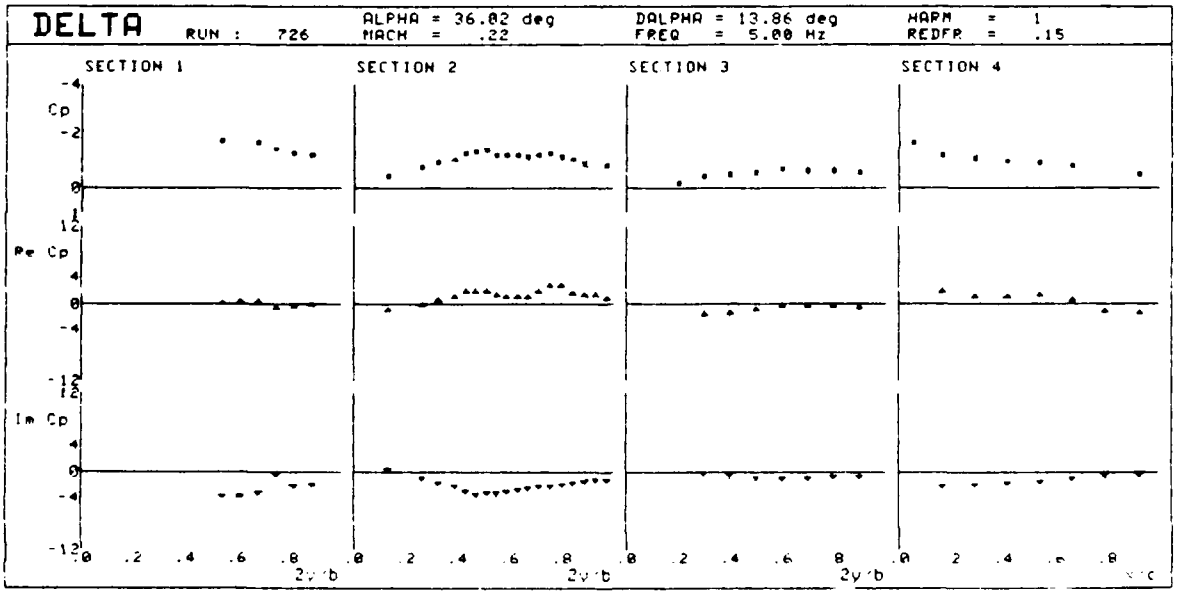

DELTA
RUN : 721
ALPHA = 36.00 deg
MACH = .22
DALPHA = 6.12 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

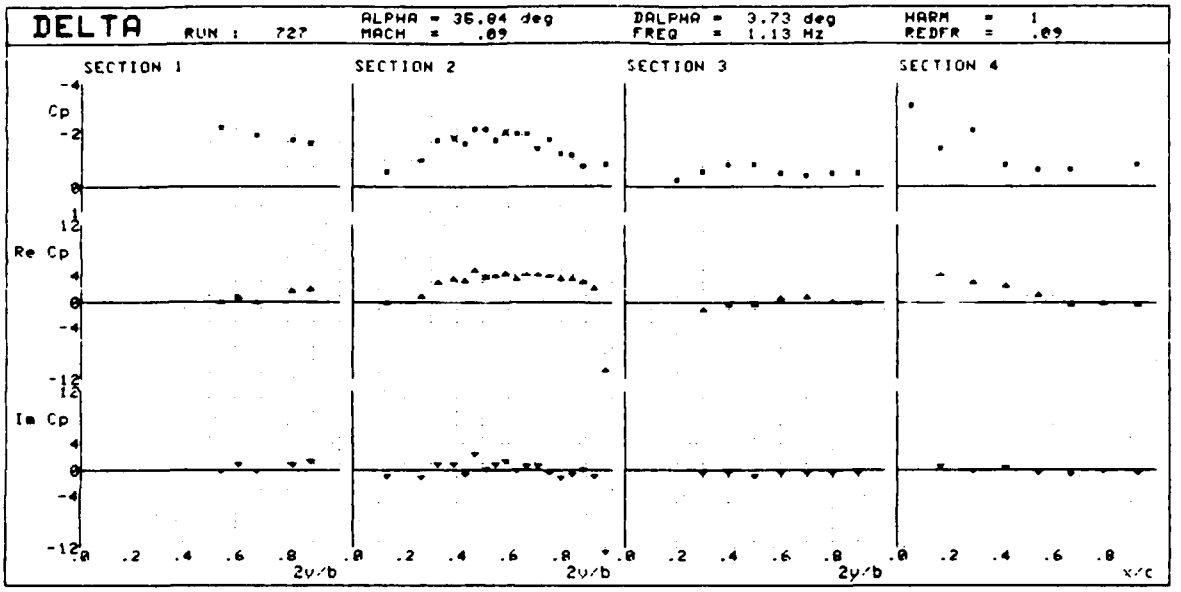

DELTA
RUN : 722
ALPHA = 35.88 deg
MACH = .22
DALPHA = 6.83 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

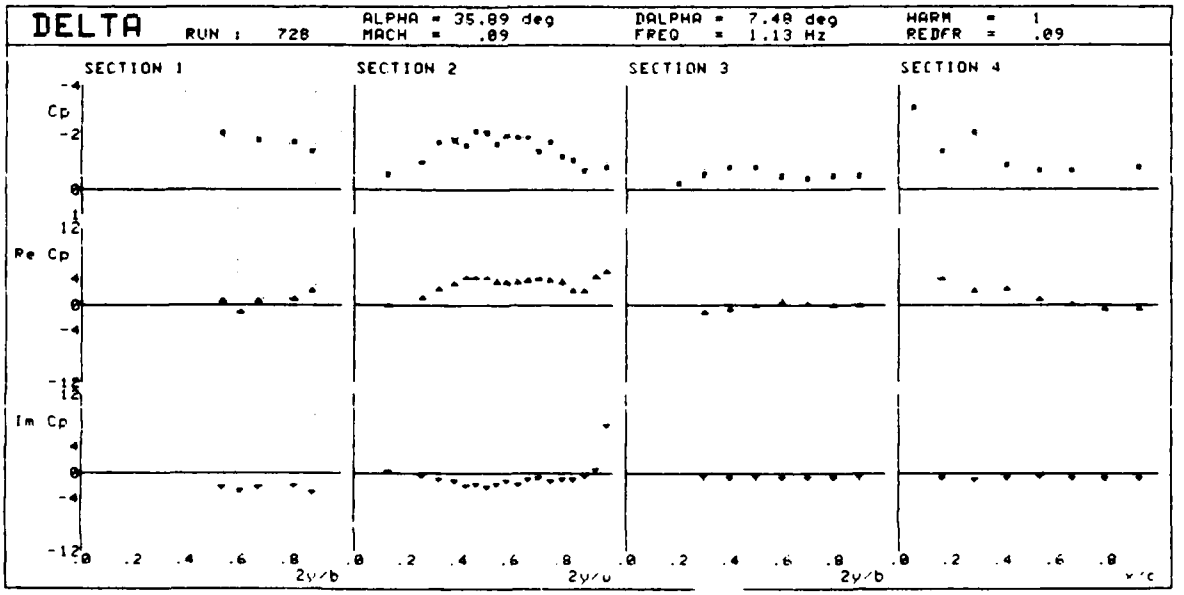

DELTA
RUN : 723
ALPHA = 35.93 deg
MACH = .22
DALPHA = 8.56 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

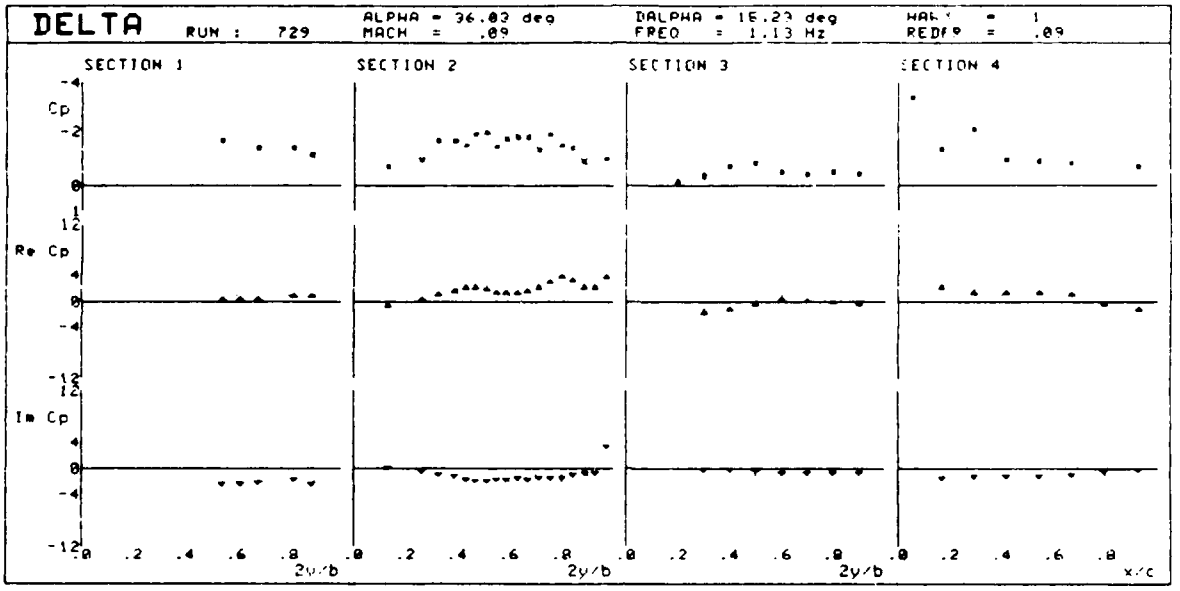

DELTA
RUN : 724
ALPHA = 35.94 deg
MACH = .22
DALPHA = 10.30 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

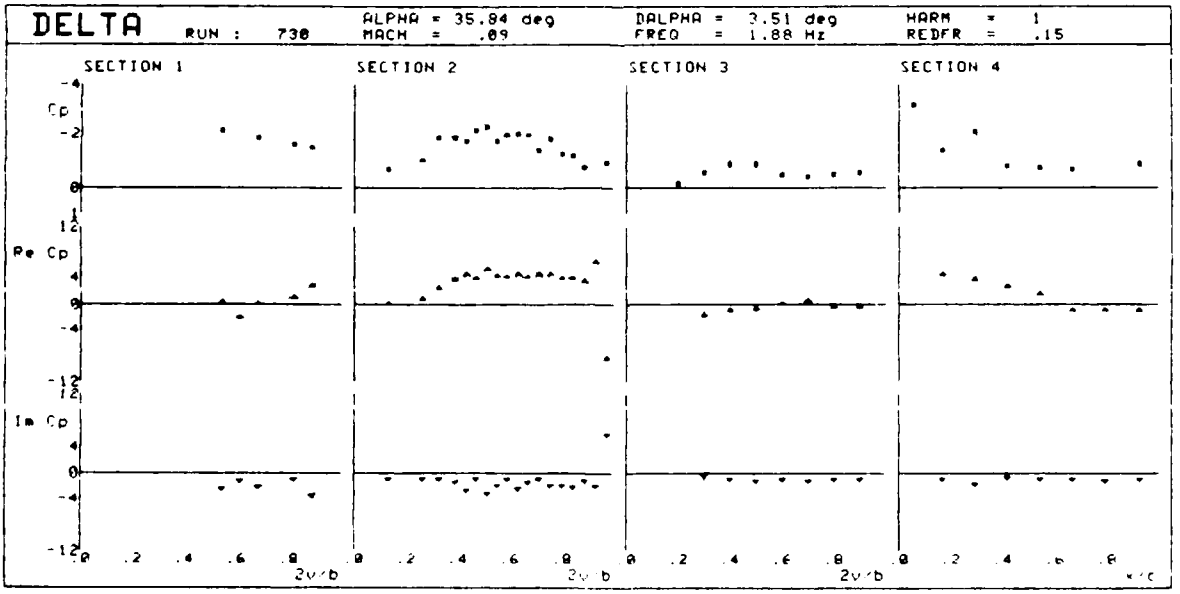

DELTA
RUN : 725
ALPHA = 36.99 deg
MACH = .22
DALPHA = 12.09 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

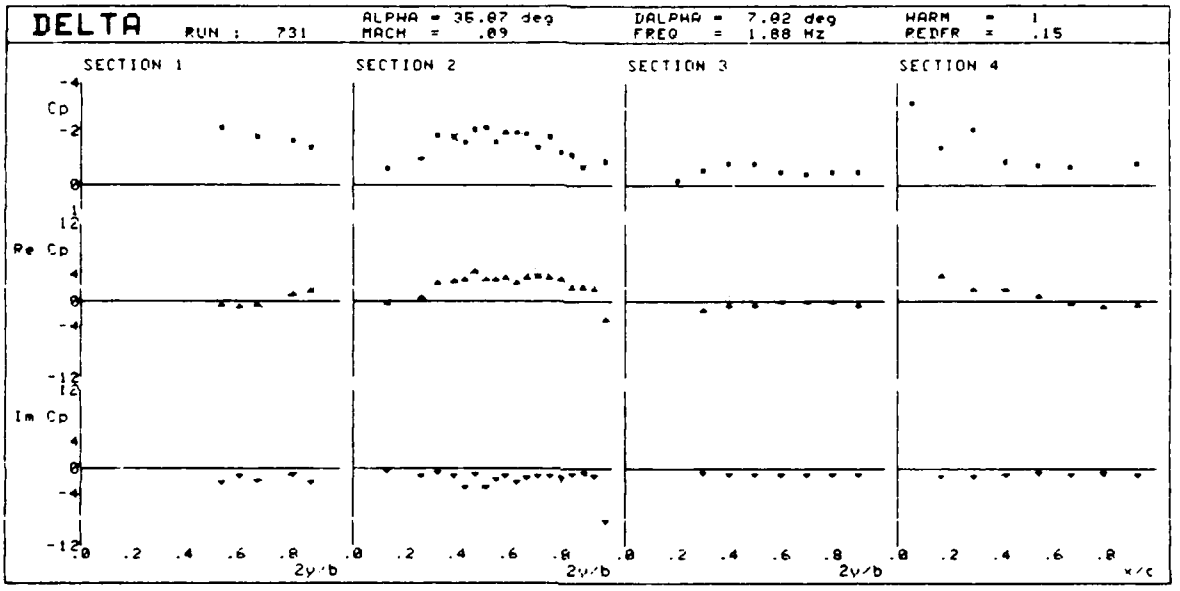

DELTA
RUN : 726
ALPHA = 36.82 deg
MACH = .22
DALPHA = 13.86 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

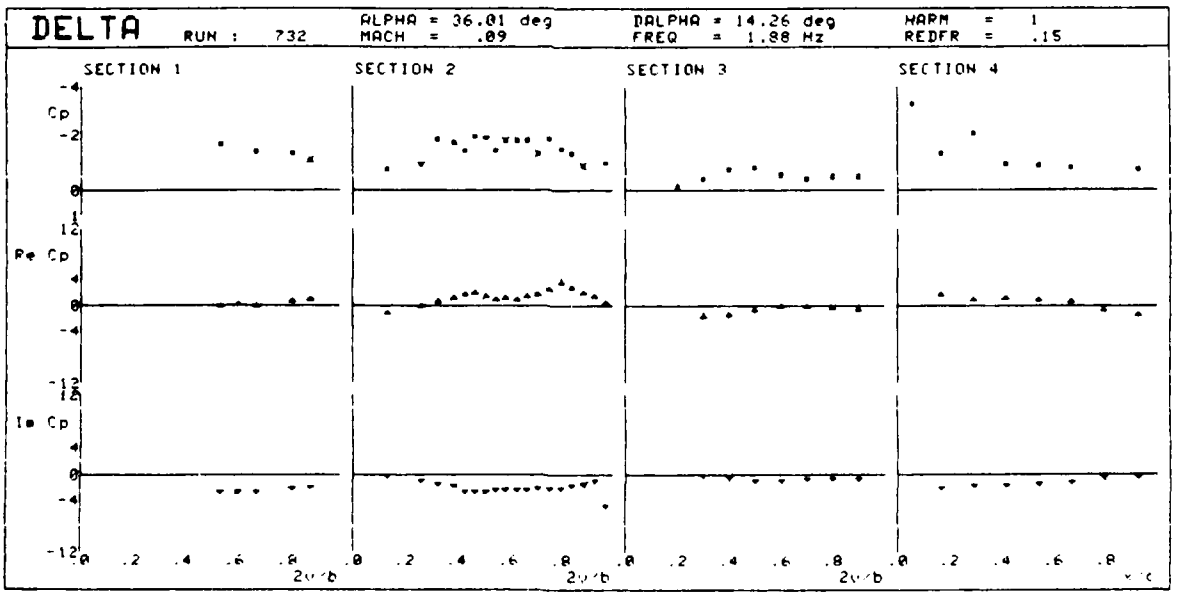

DELTA
RUN : 727
ALPHA = 36.04 deg
MACH = .09
DALPHA = 3.73 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

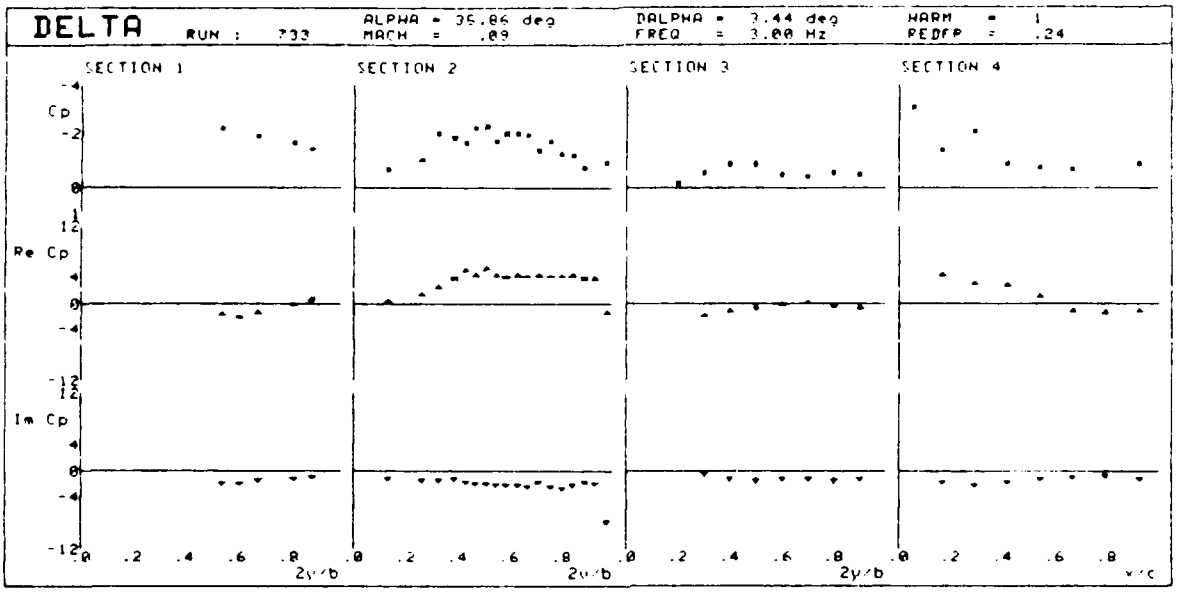

DELTA
RUN : 728
ALPHA = 35.89 deg
MACH = .09
DALPHA = 7.48 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

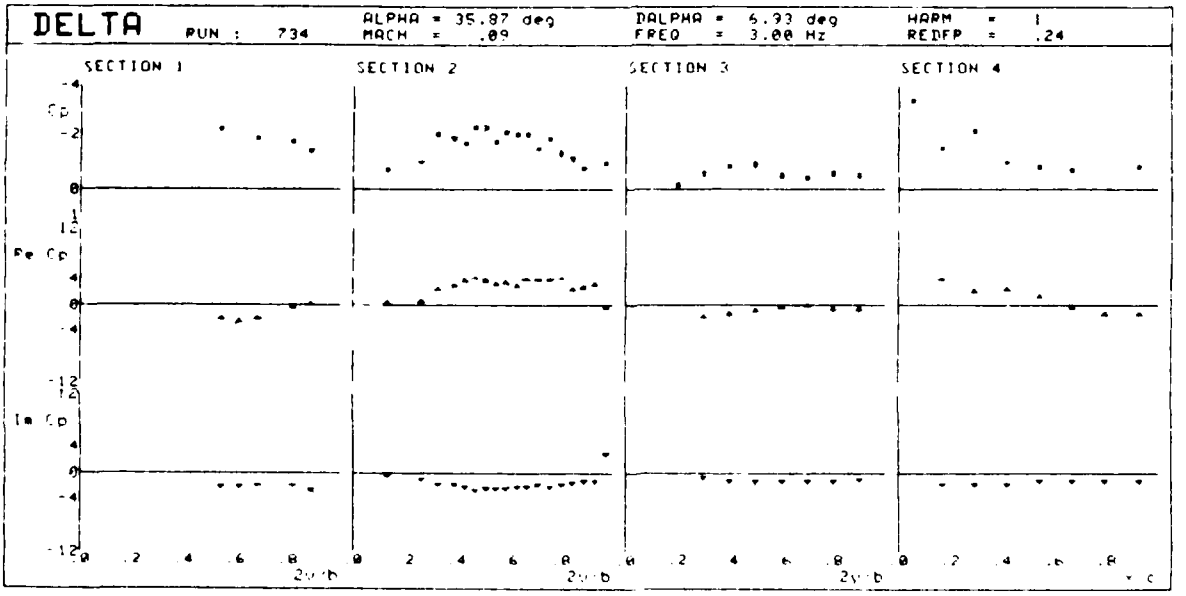

DELTA
RUN : 729
ALPHA = 36.03 deg
MACH = .09
DALPHA = 15.23 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

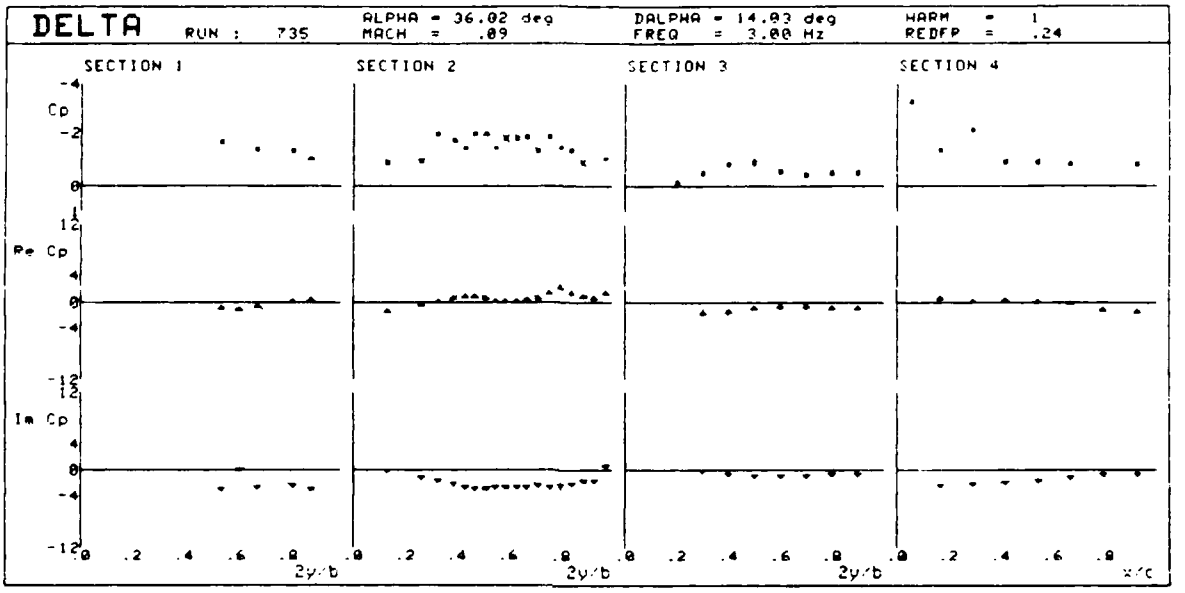

DELTA
RUN : 730
ALPHA = 35.84 deg
MACH = .09
DALPHA = 3.51 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

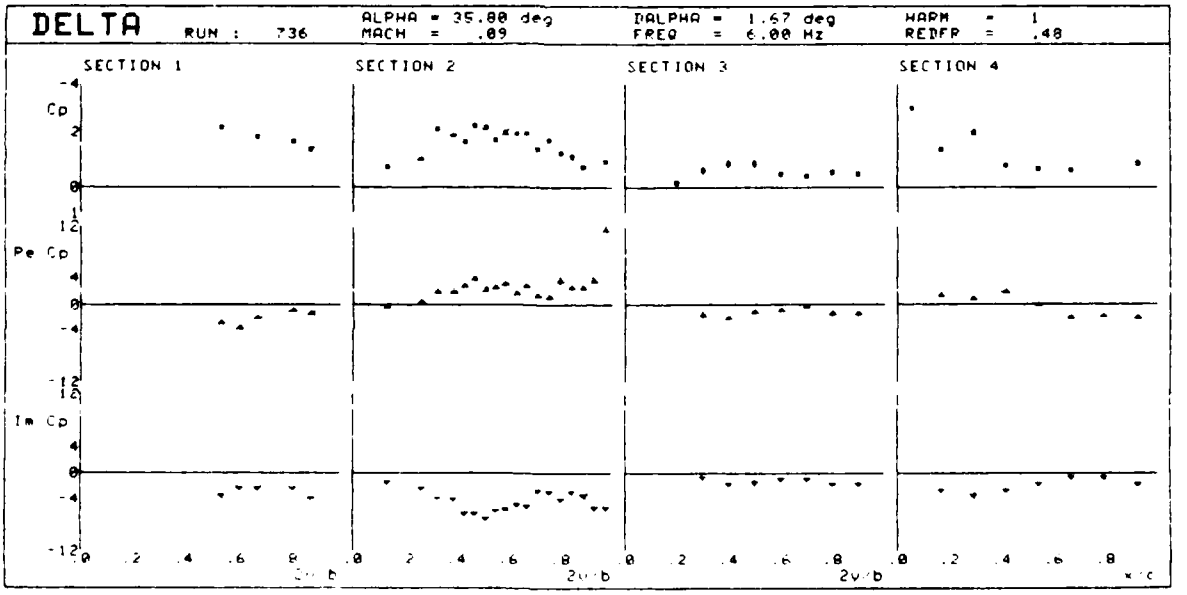

DELTA
RUN : 731
ALPHA = 35.87 deg
MACH = .09
DALPHA = 7.02 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

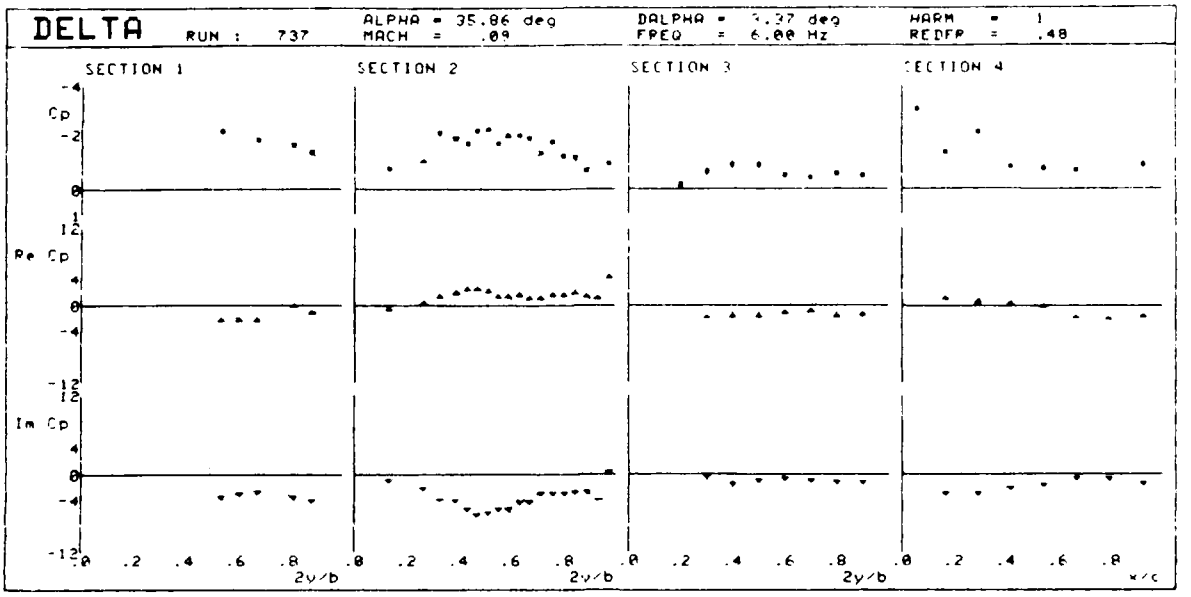

DELTA
RUN : 732
ALPHA = 36.01 deg
MACH = .09
DALPHA = 14.26 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

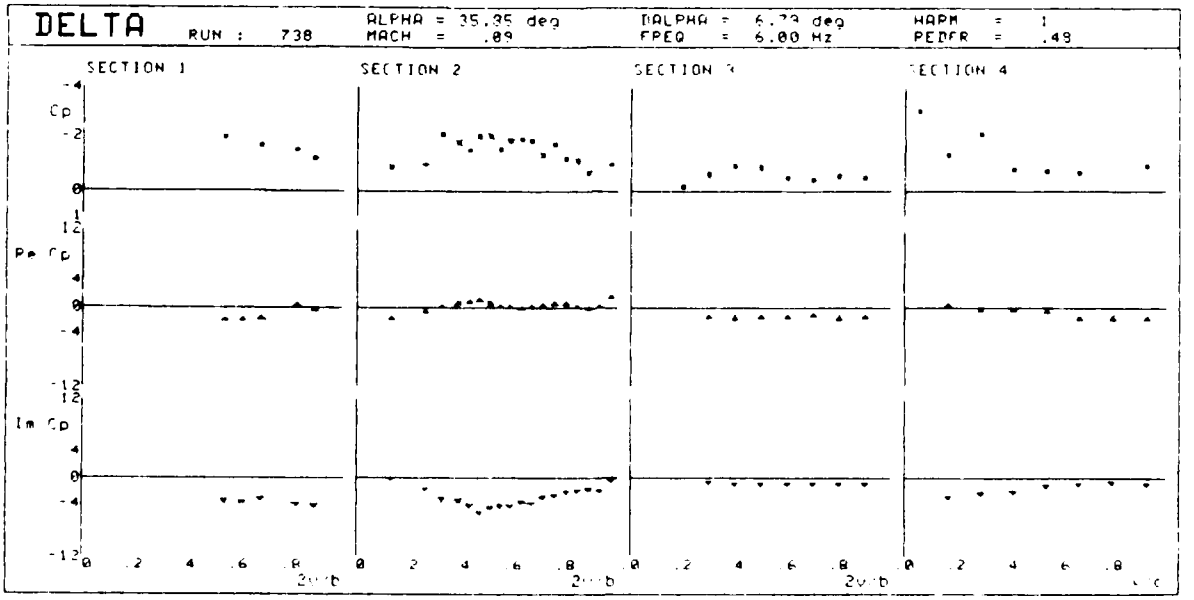

DELTA
RUN : 733
ALPHA = 35.86 deg
MACH = .89
DALPHA = 3.44 deg
FREQ = 3.00 Hz
HARM = 1
REDFP = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

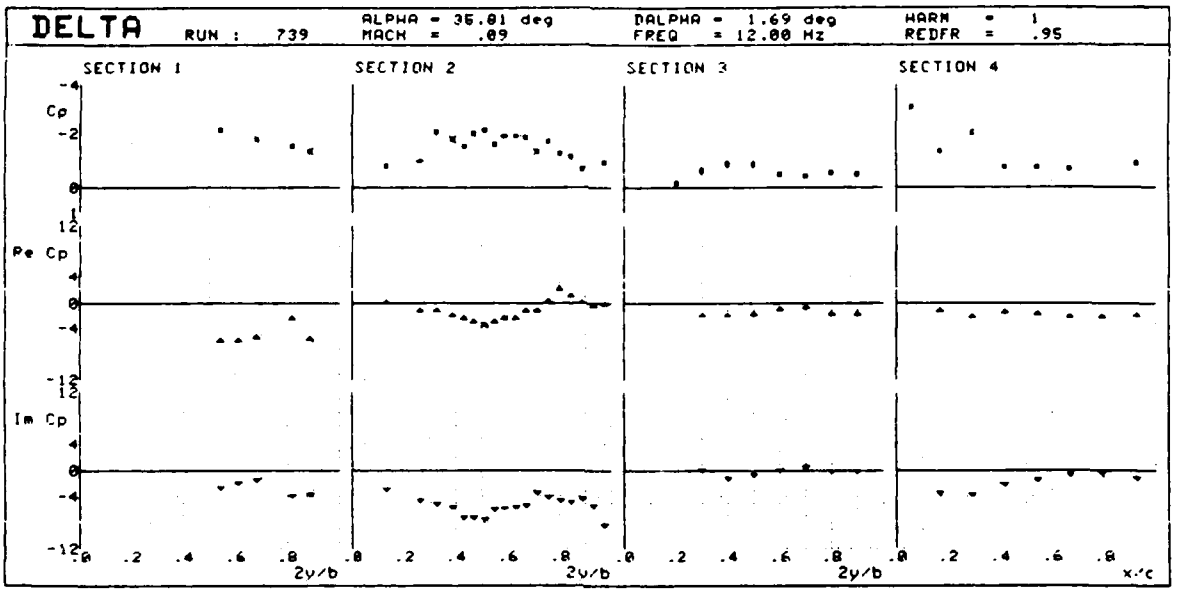

DELTA
RUN : 734
ALPHA = 35.87 deg
MACH = .89
DALPHA = 6.93 deg
FREQ = 3.00 Hz
HARM = 1
REDFP = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

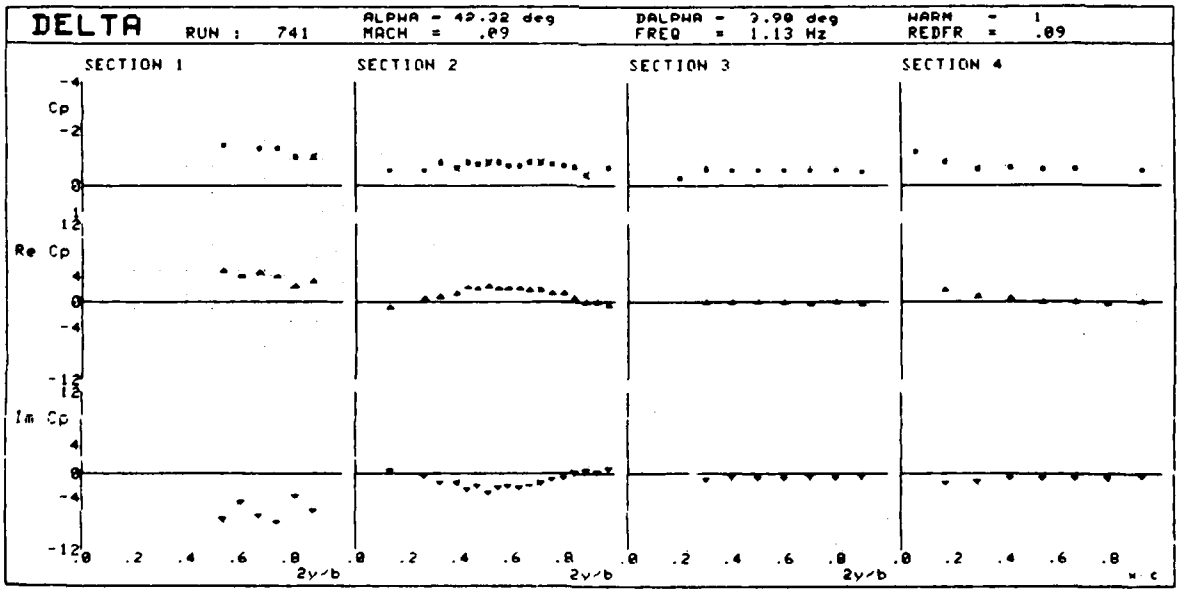

DELTA
RUN : 735
ALPHA = 36.02 deg
MACH = .09
DALPHA = 14.03 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

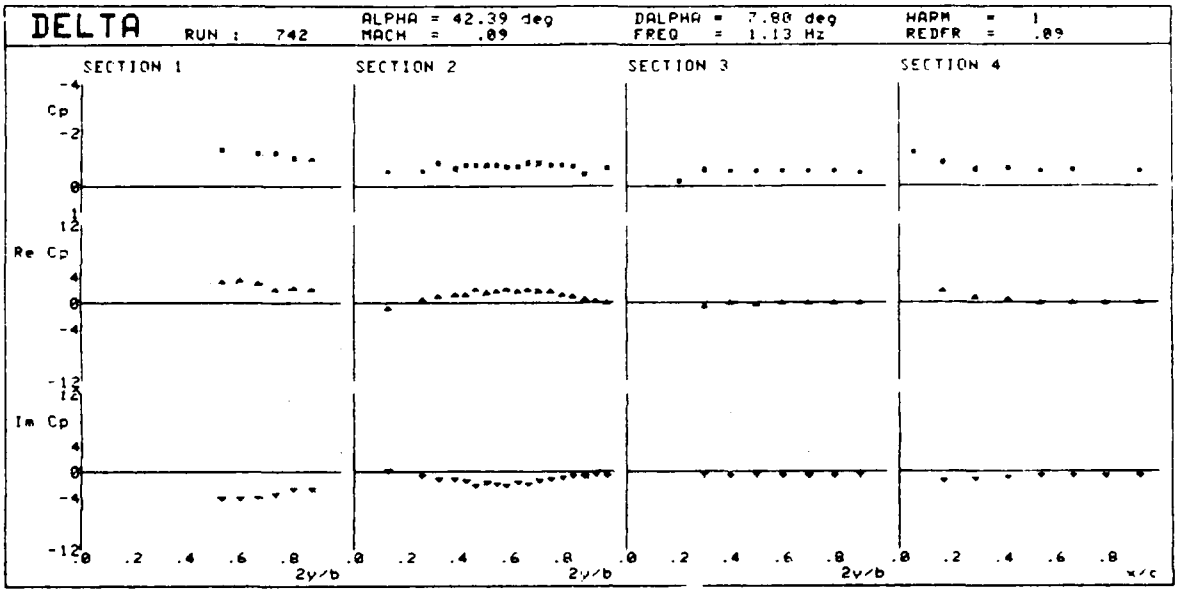

DELTA
RUN : 736
ALPHA = 35.80 deg
MACH = .09
DALPHA = 1.67 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

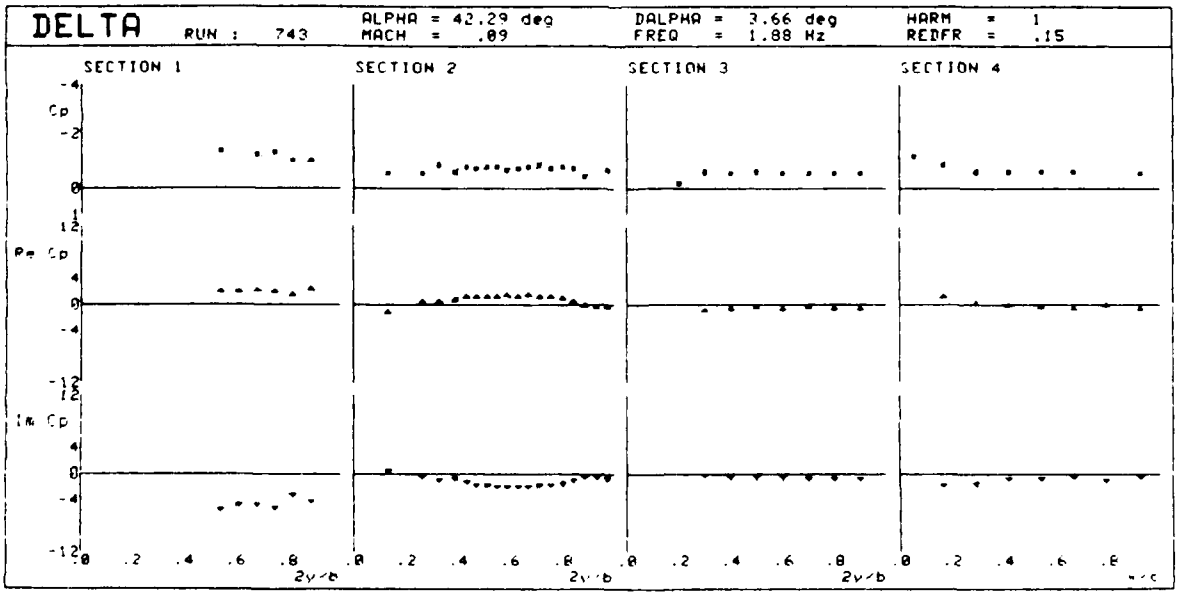

DELTA
RUN : 737
ALPHA = 35.86 deg
MACH = .09
DALPHA = 3.37 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

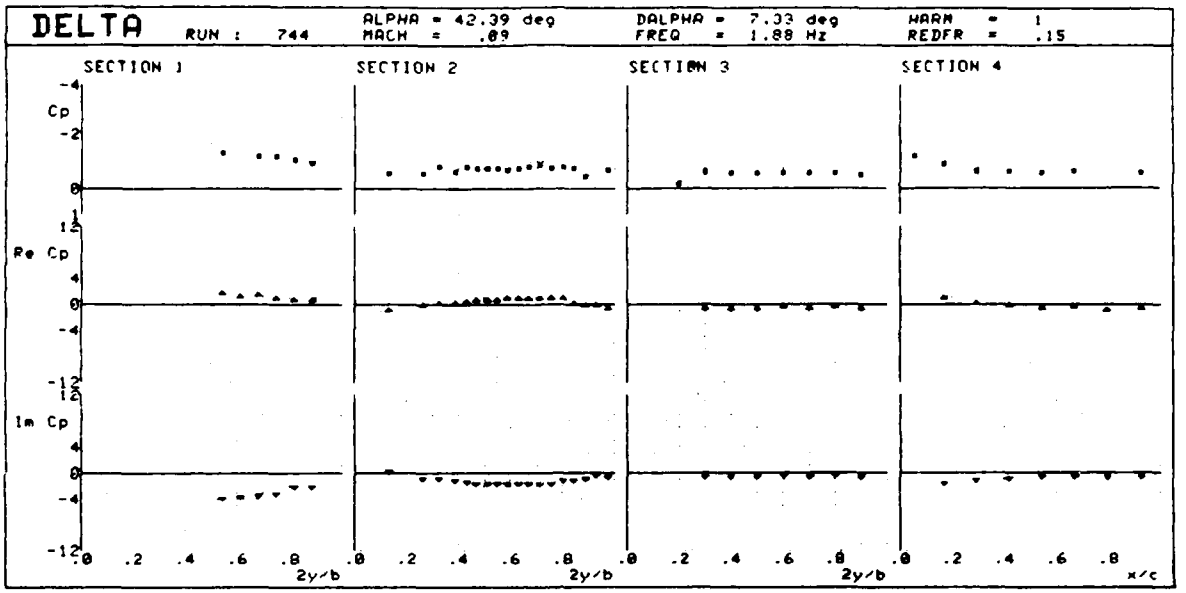

DELTA
RUN : 738
ALPHA = 35.35 deg
MACH = .09
DALPHA = 6.79 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

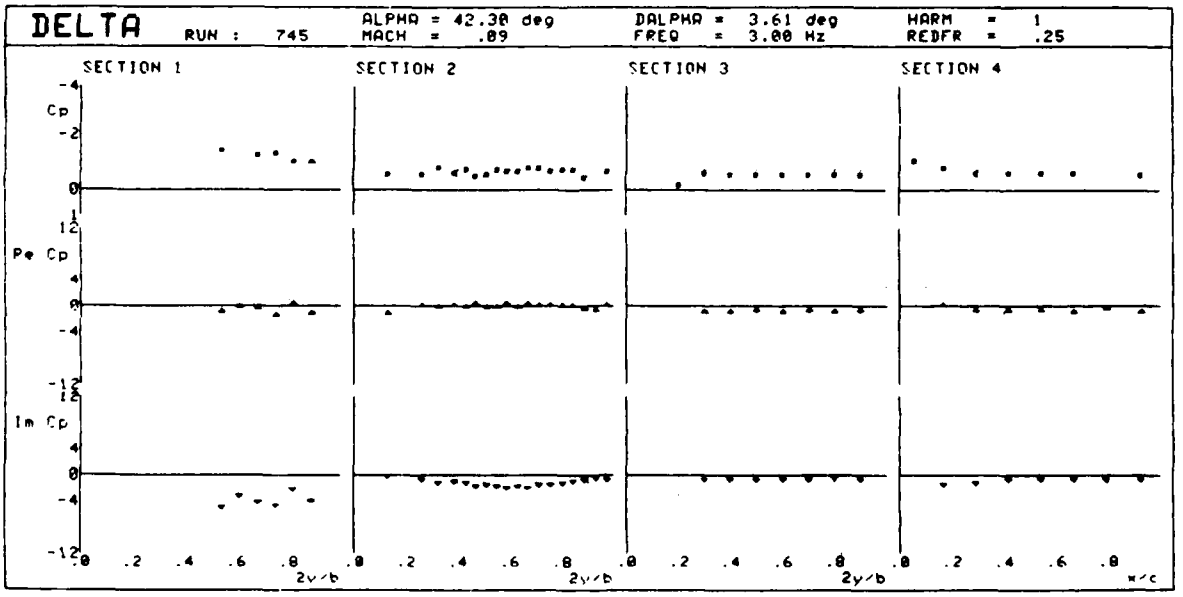

DELTA
RUN : 739
ALPHA = 35.81 deg
MACH = .09
DALPHA = 1.69 deg
FREQ = 12.00 Hz
HARM = 1
REDFR = .95
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

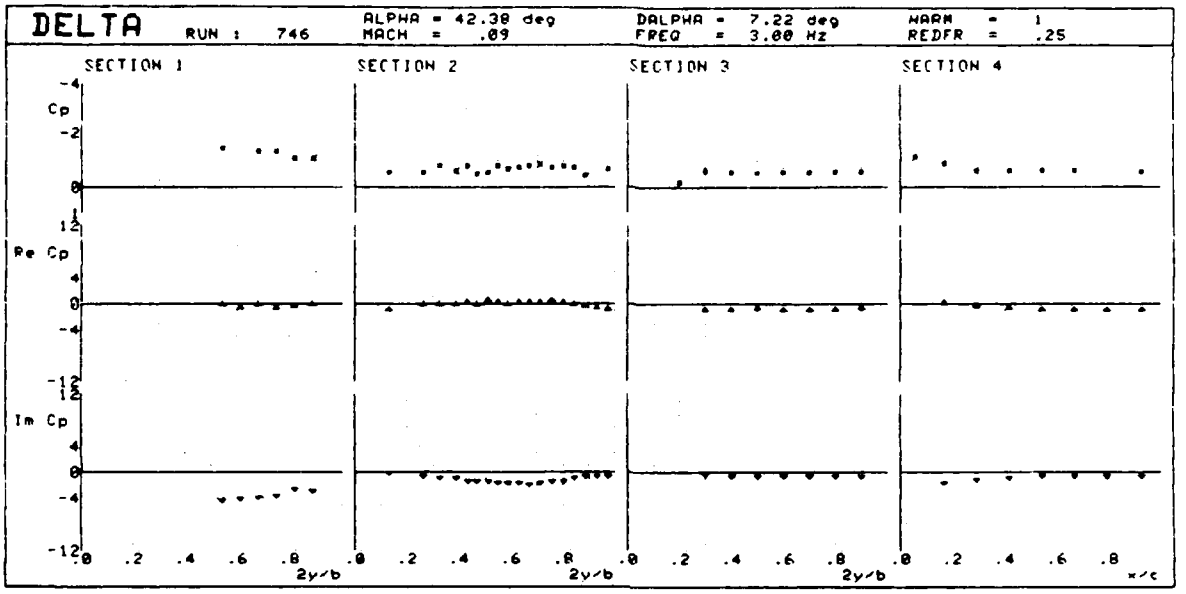

DELTA
RUN : 741
ALPHA = 42.32 deg
MACH = .09
DALPHA = 2.90 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

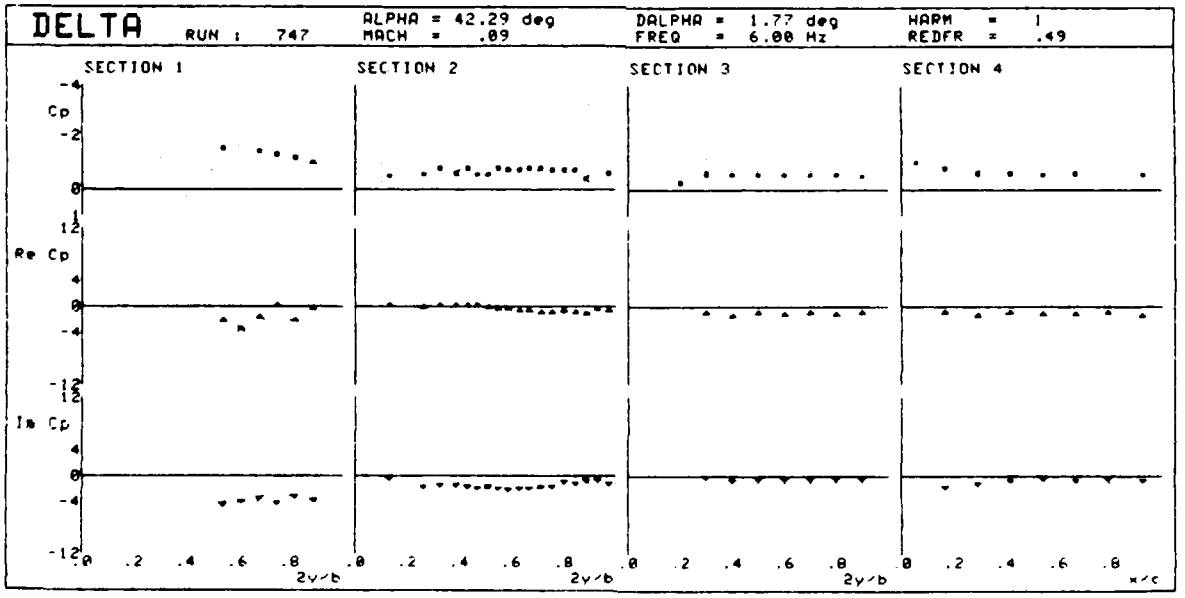

DELTA
RUN : 742
ALPHA = 42.39 deg
MACH = .09
DALPHA = 7.80 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

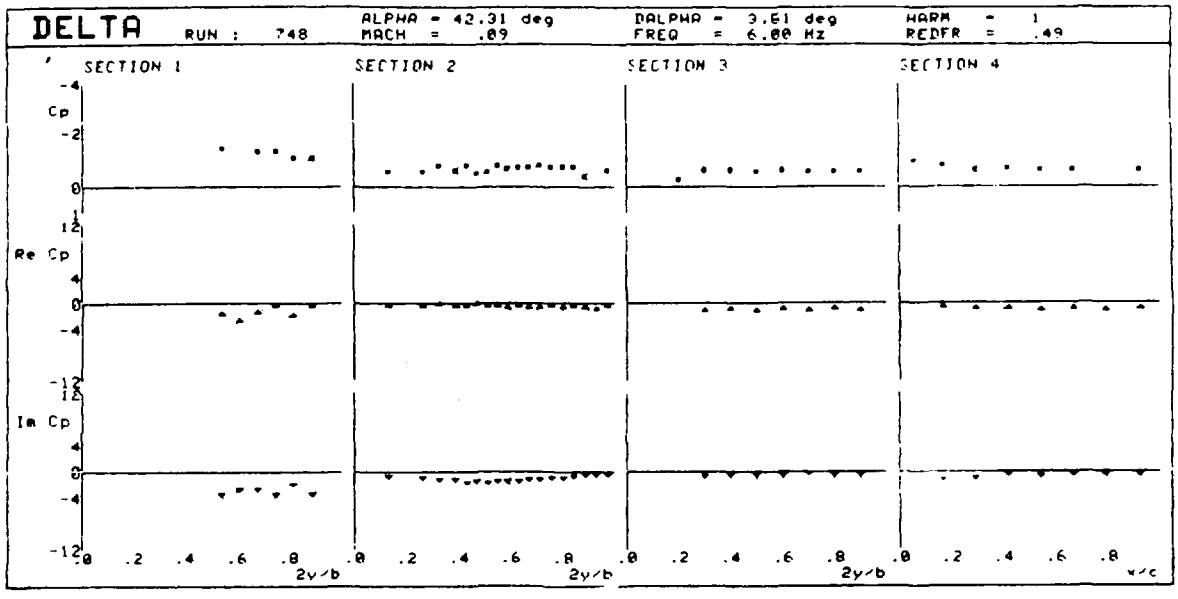

DELTA
RUN : 743
ALPHA = 42.29 deg
MACH = .09
DALPHA = 3.66 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

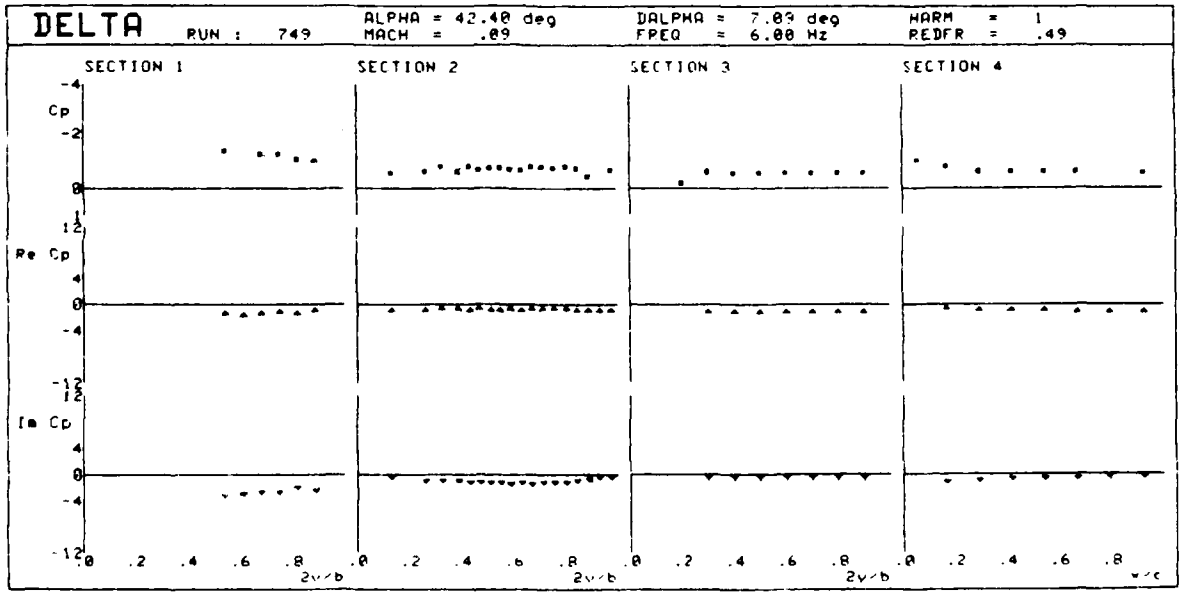

DELTA
RUN : 744
ALPHA = 42.39 deg
MACH = .89
DALPHA = 7.33 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

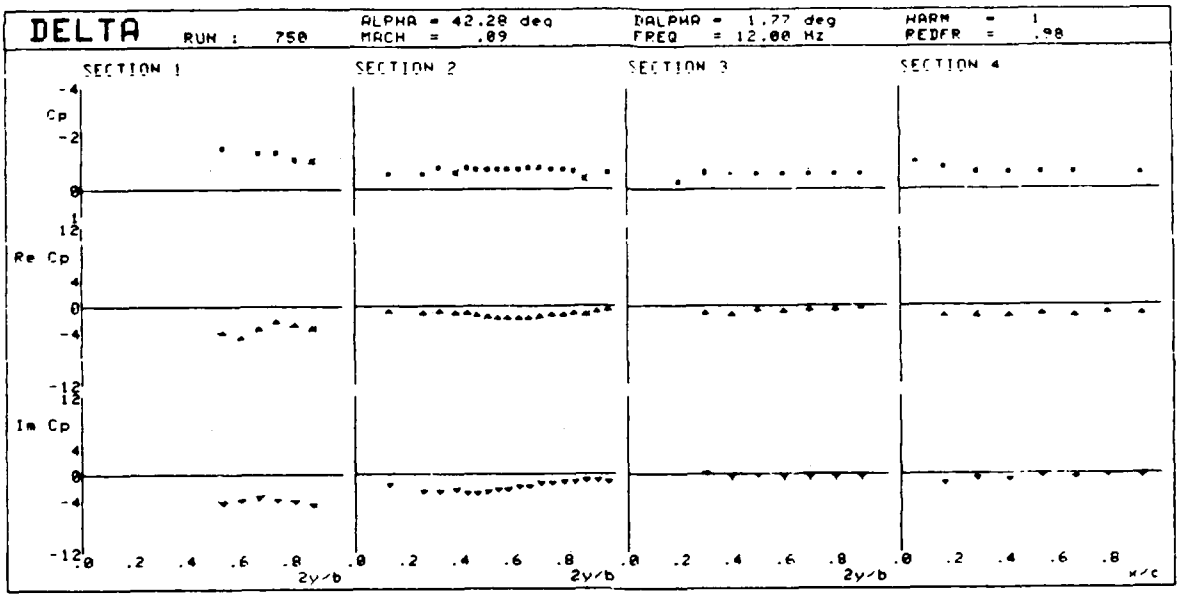

DELTA
RUN : 745
ALPHA = 42.38 deg
MACH = .89
DALPHA = 3.61 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

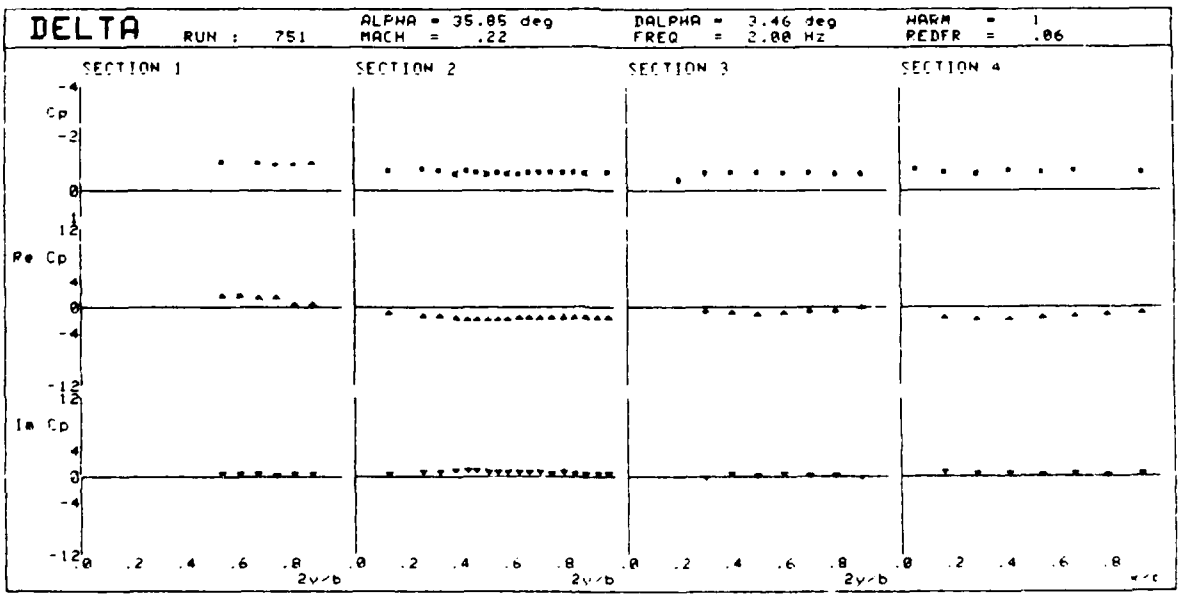

DELTA
RUN : 746
ALPHA = 42.38 deg
MACH = .09
DALPHA = 7.22 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

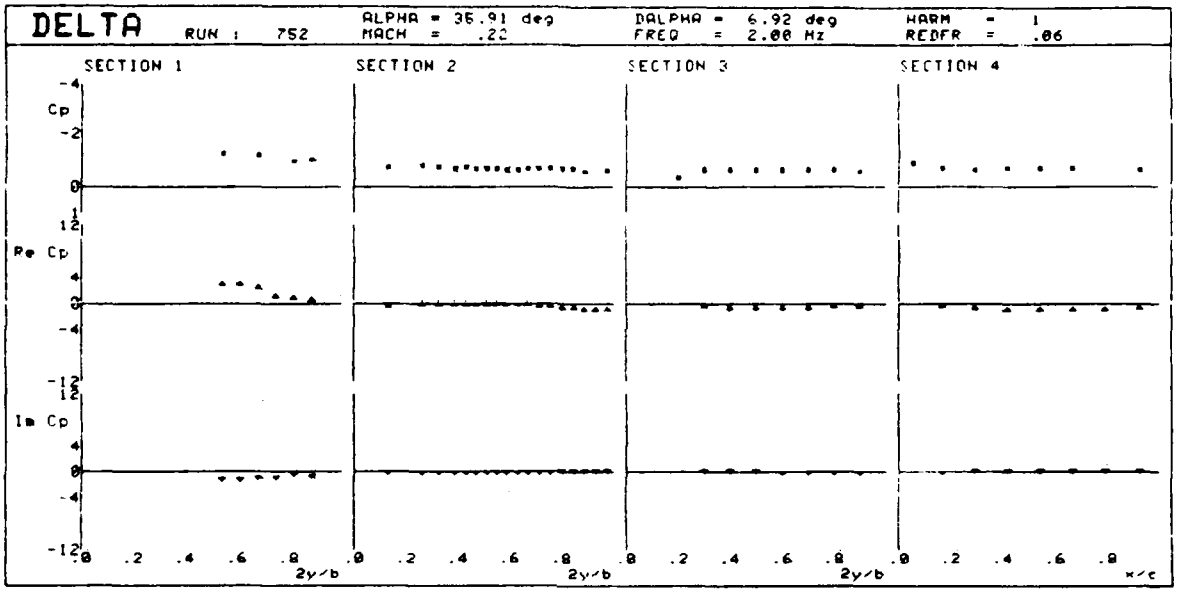

DELTA
RUN : 747
ALPHA = 42.29 deg
MACH = .09
DALPHA = 1.77 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

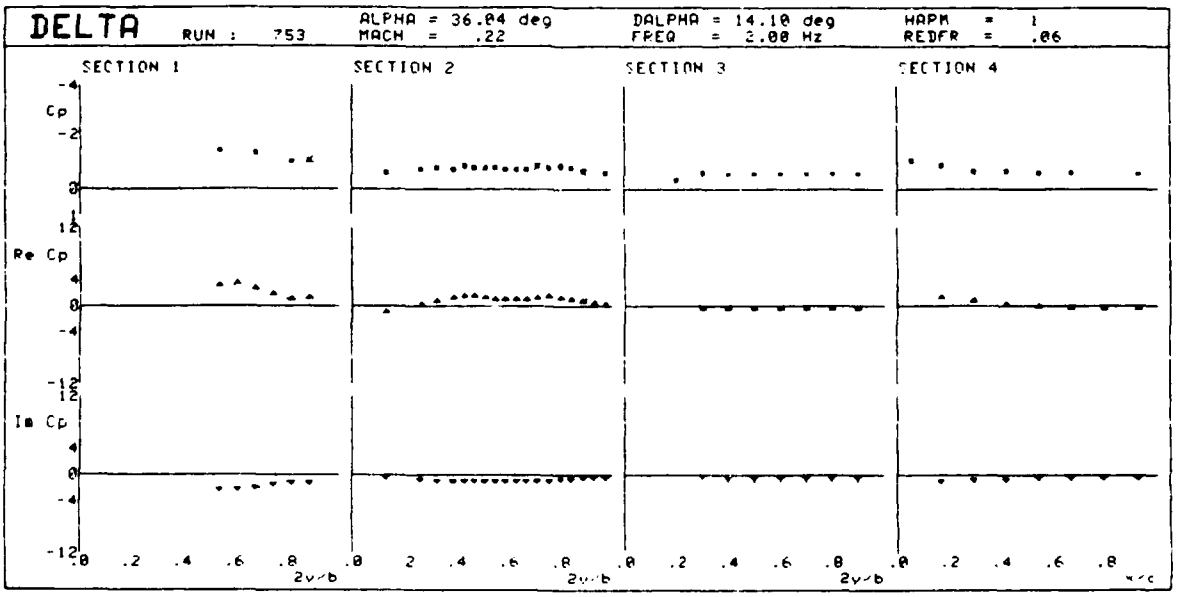

DELTA
RUN : 748
ALPHA = 42.31 deg
MACH = .09
DALPHA = 3.61 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

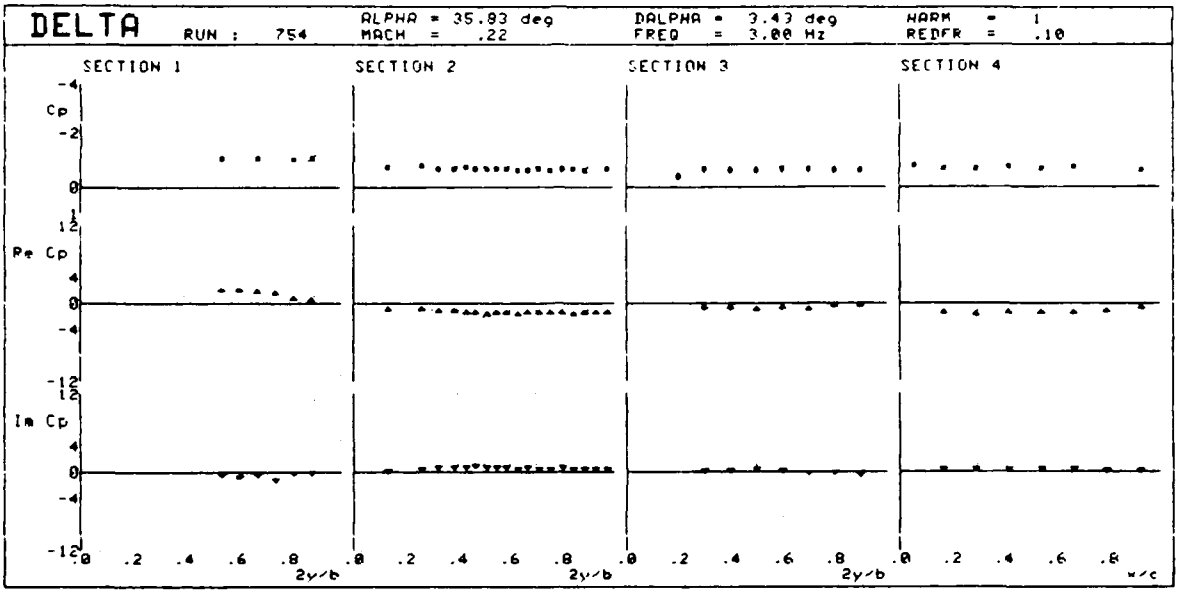

DELTA
RUN : 749
ALPHA = 42.40 deg
MACH = .09
DALPHA = 7.03 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

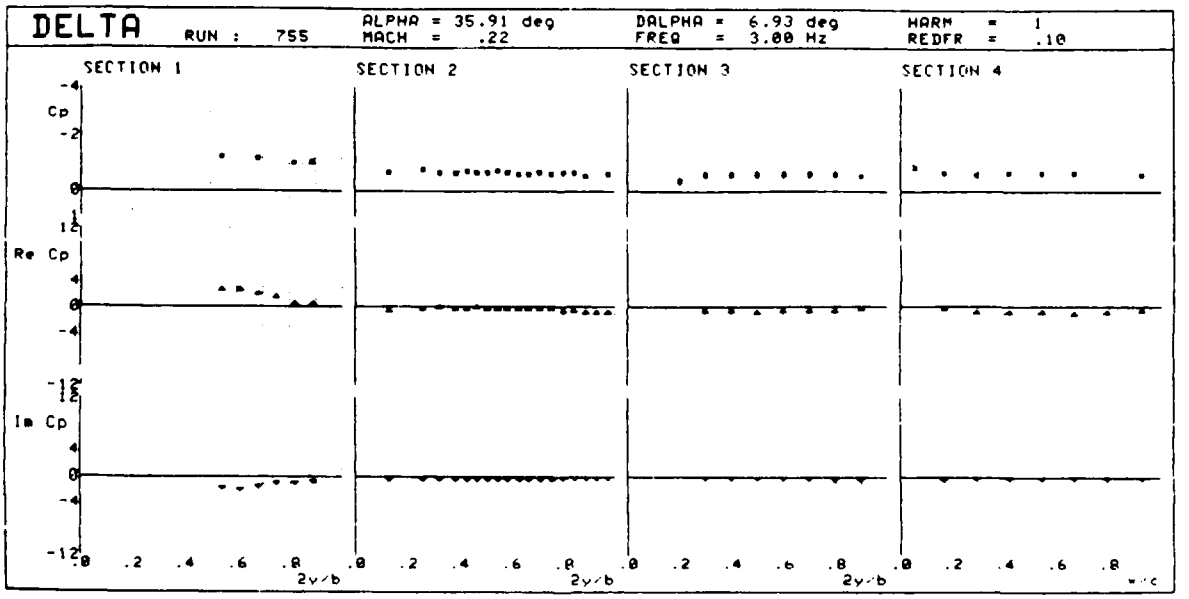

DELTA
RUN : 750
ALPHA = 42.28 deg
MACH = .09
DALPHA = 1.77 deg
FREQ = 12.00 Hz
HARM = 1
REDFR = .98
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

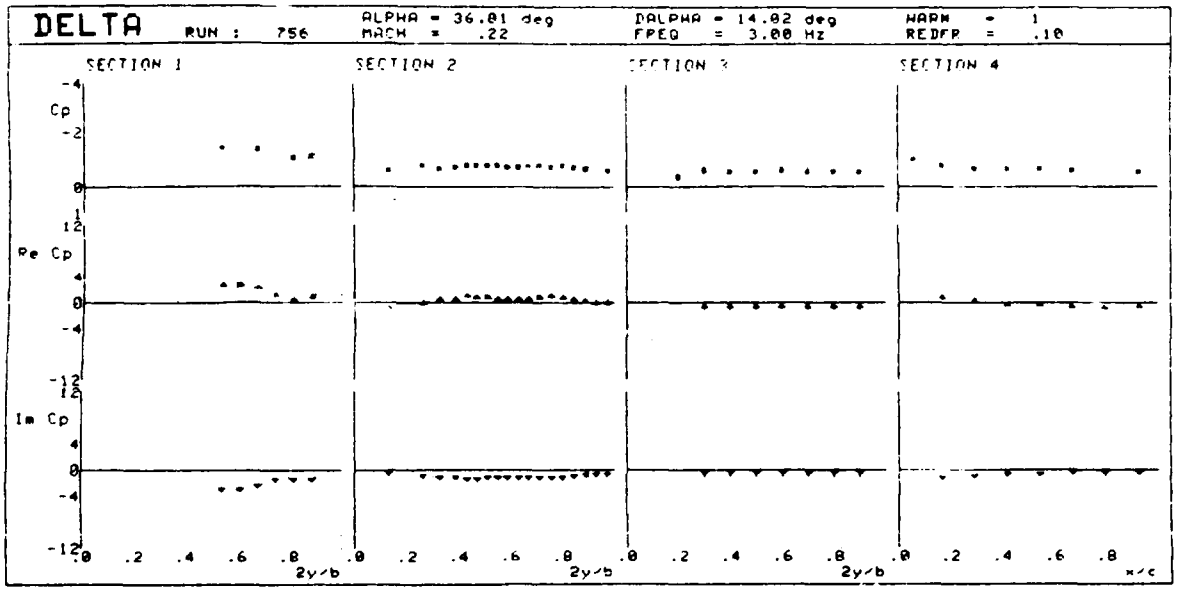

DELTA
RUN : 751
ALPHA = 35.85 deg
MACH = .22
DALPHA = 3.46 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

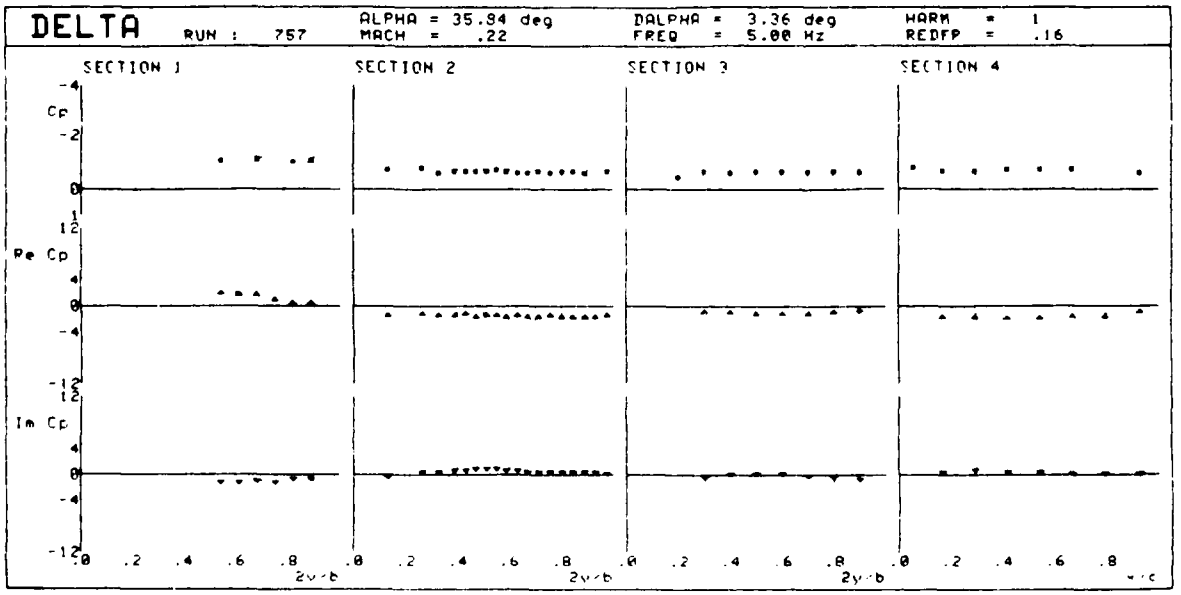

DELTA
RUN : 752
ALPHA = 36.91 deg
MACH = .22
DALPHA = 6.92 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

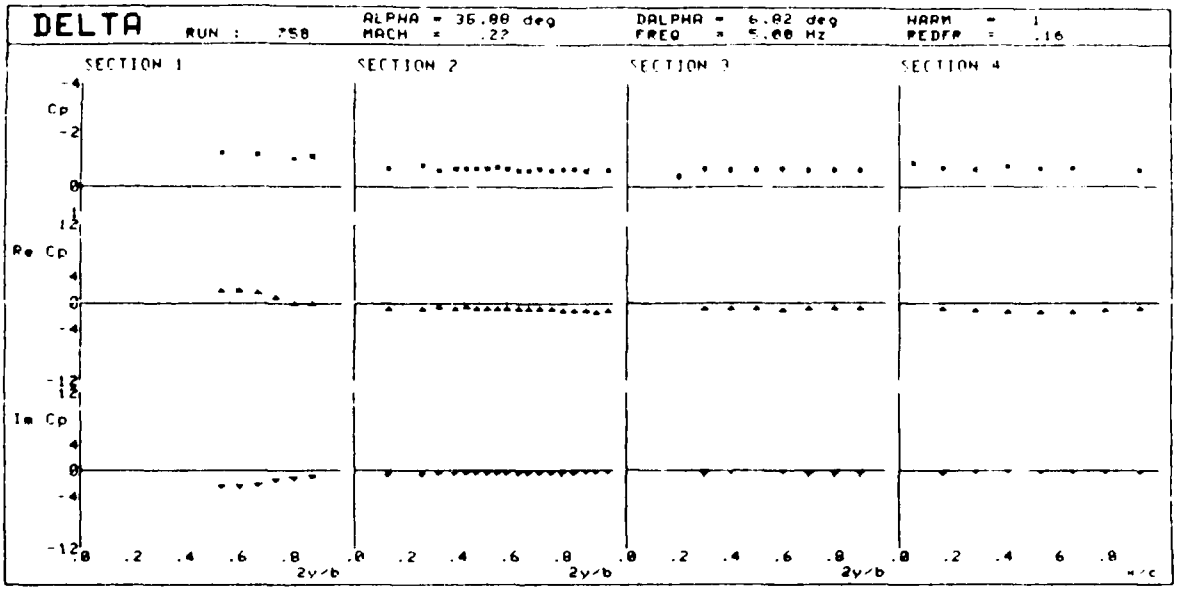

DELTA
RUN : 753
ALPHA = 36.84 deg
MACH = .22
DALPHA = 14.10 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

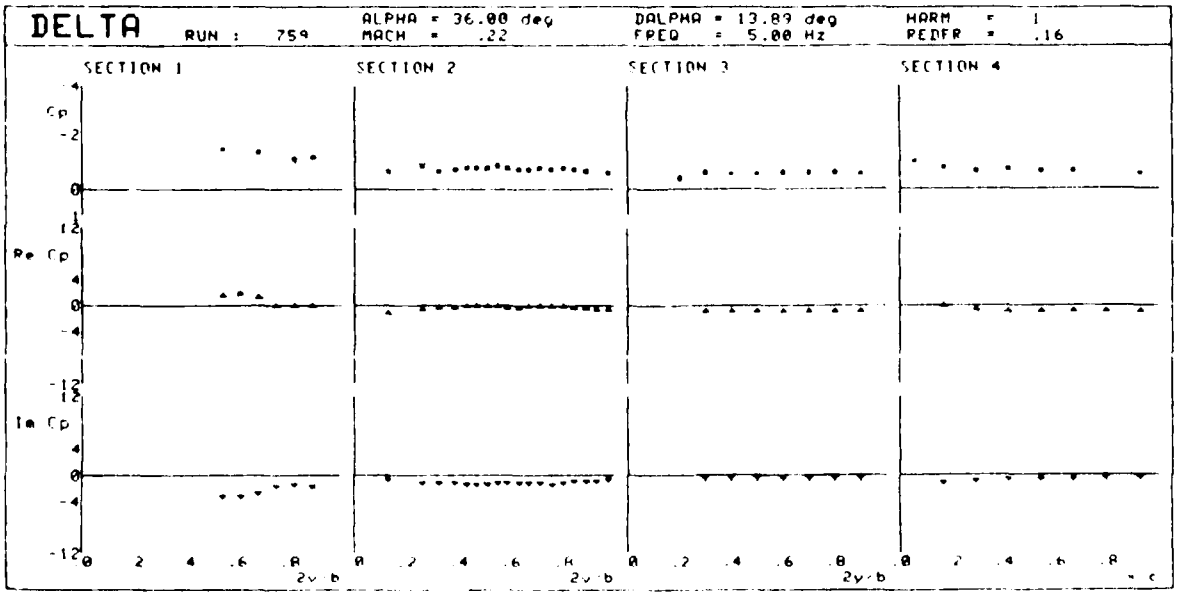

DELTA
RUN : 754
ALPHA = 35.93 deg
MACH = .22
DALPHA = 3.43 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .10
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

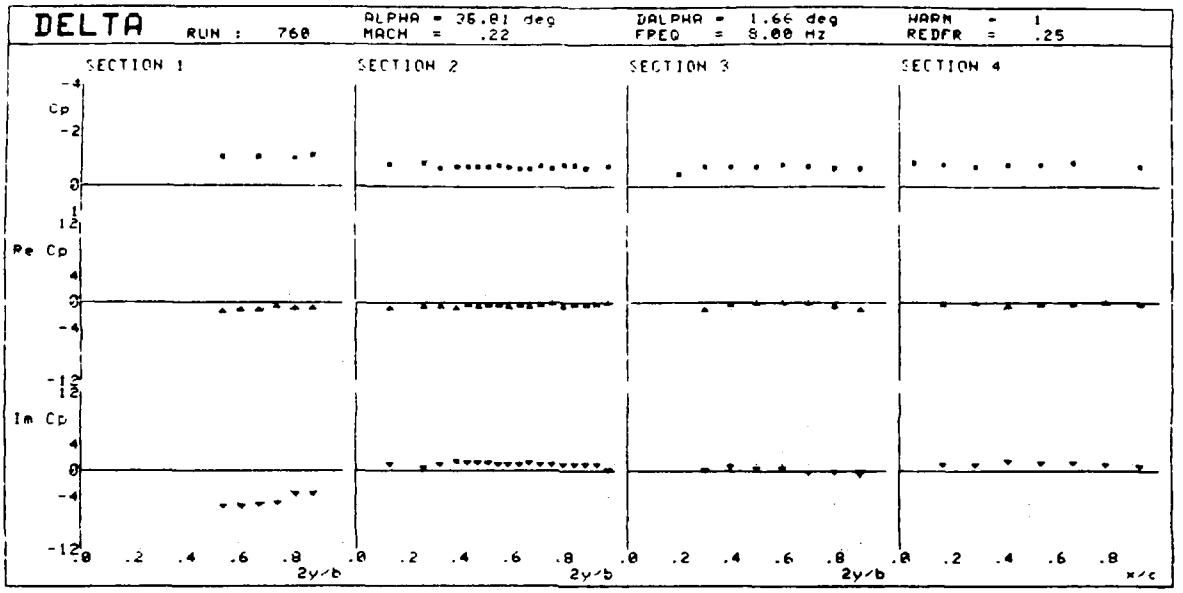

DELTA
RUN : 755
ALPHA = 35.91 deg
MACH = .22
DALPHA = 6.93 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .10
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

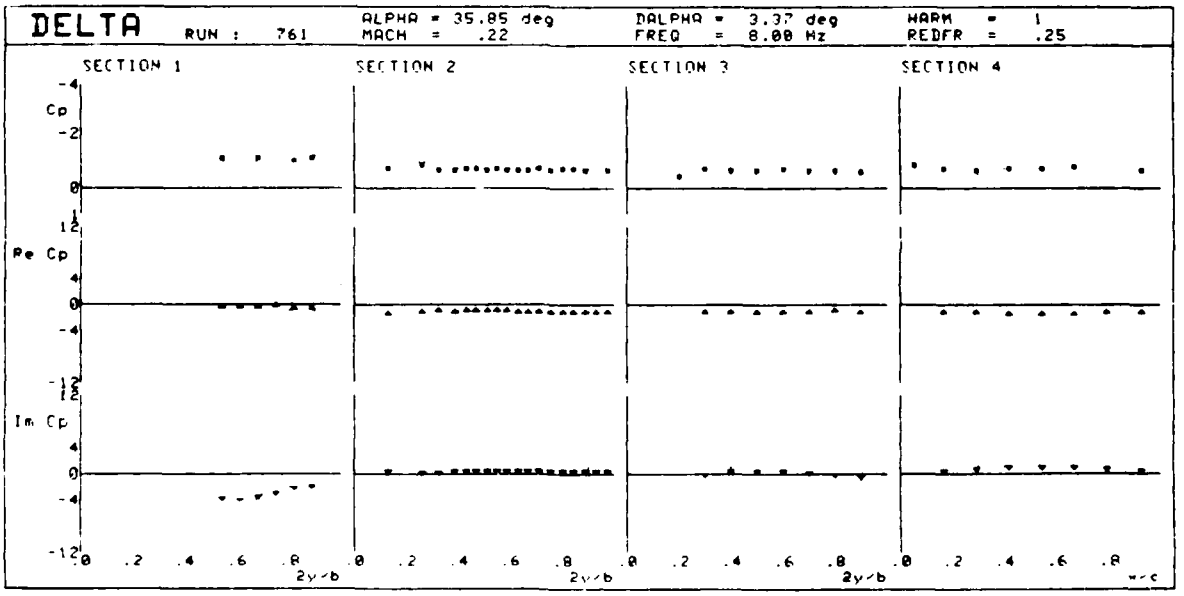

DELTA
RUN : 756
ALPHA = 36.81 deg
MACH = .22
DALPHA = 14.02 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .10
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

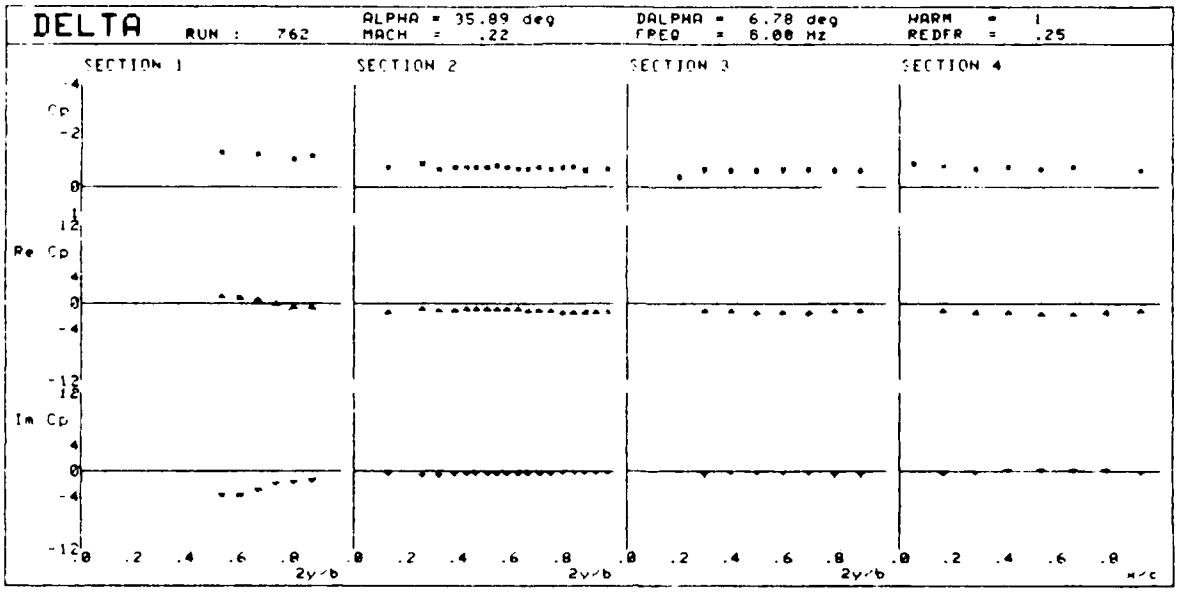

DELTA
RUN : 757
ALPHA = 35.84 deg
MACH = .22
DALPHA = 3.36 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

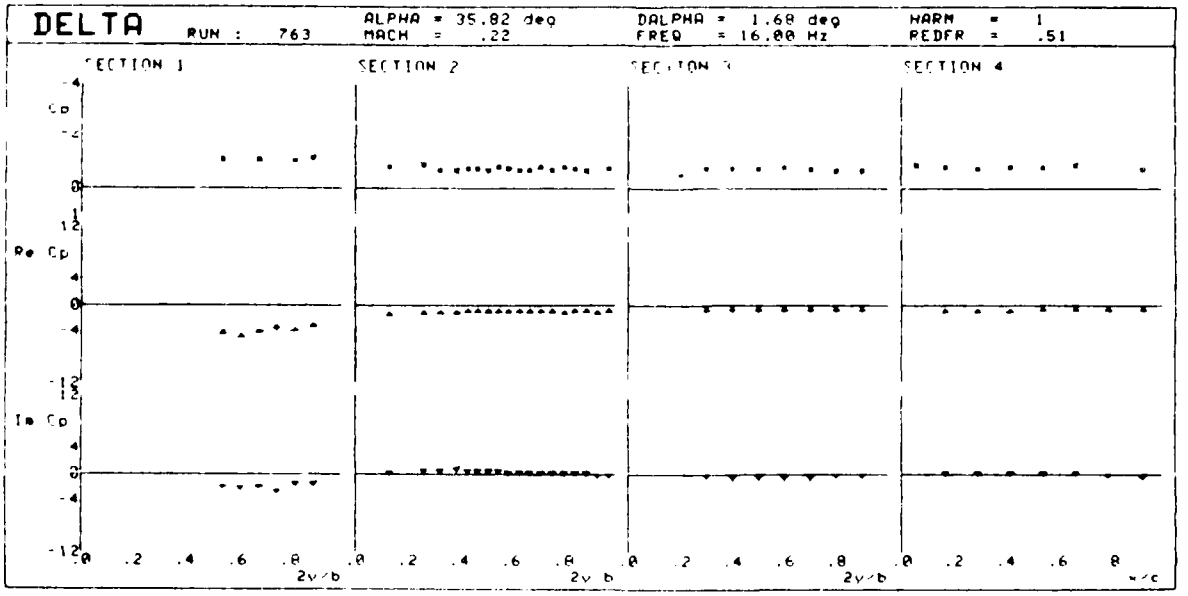

DELTA
RUN : 758
ALPHA = 36.00 deg
MACH = .22
DALPHA = 6.82 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

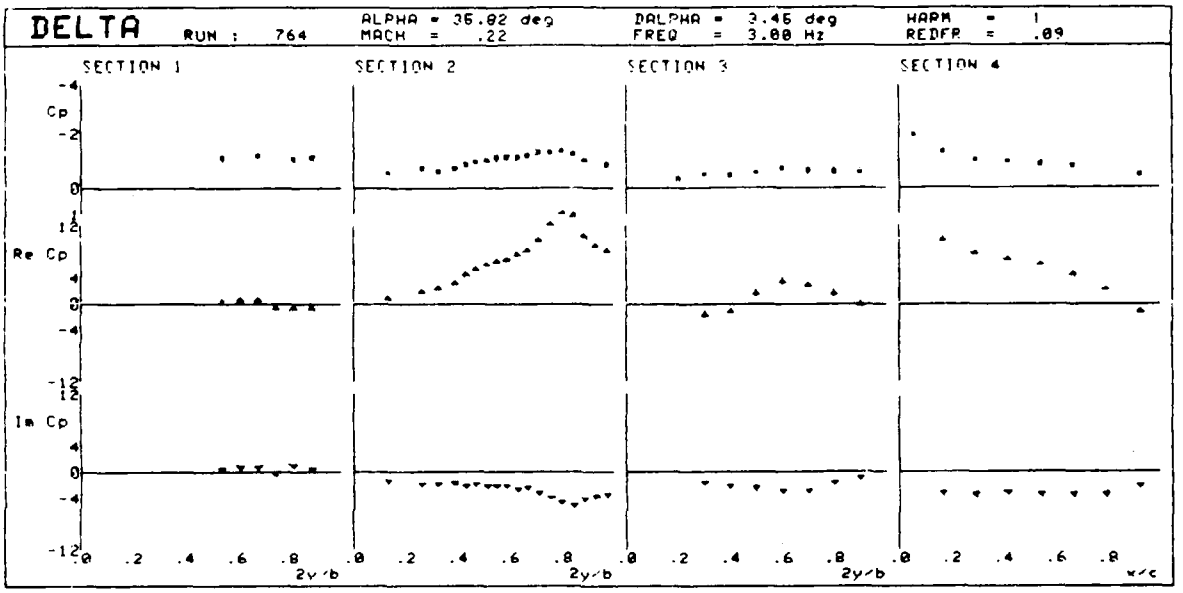

DELTA
RUN : 759
ALPHA = 36.00 deg
MACH = .22
DALPHA = 13.89 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

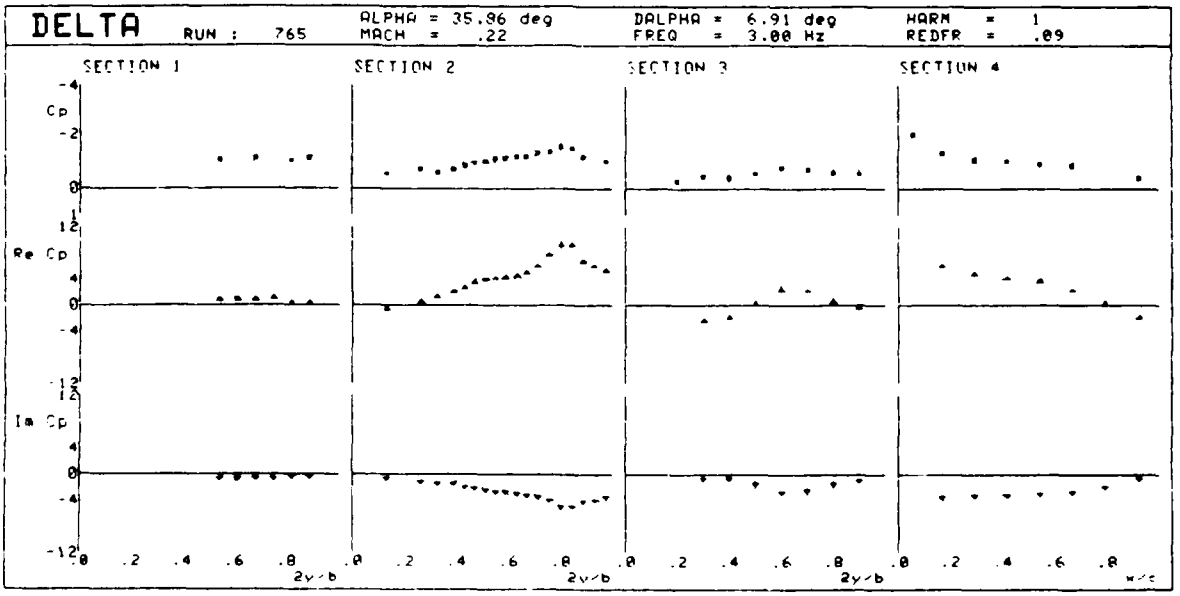

DELTA
RUN : 760
ALPHA = 35.81 deg
MACH = .22
DALPHA = 1.66 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

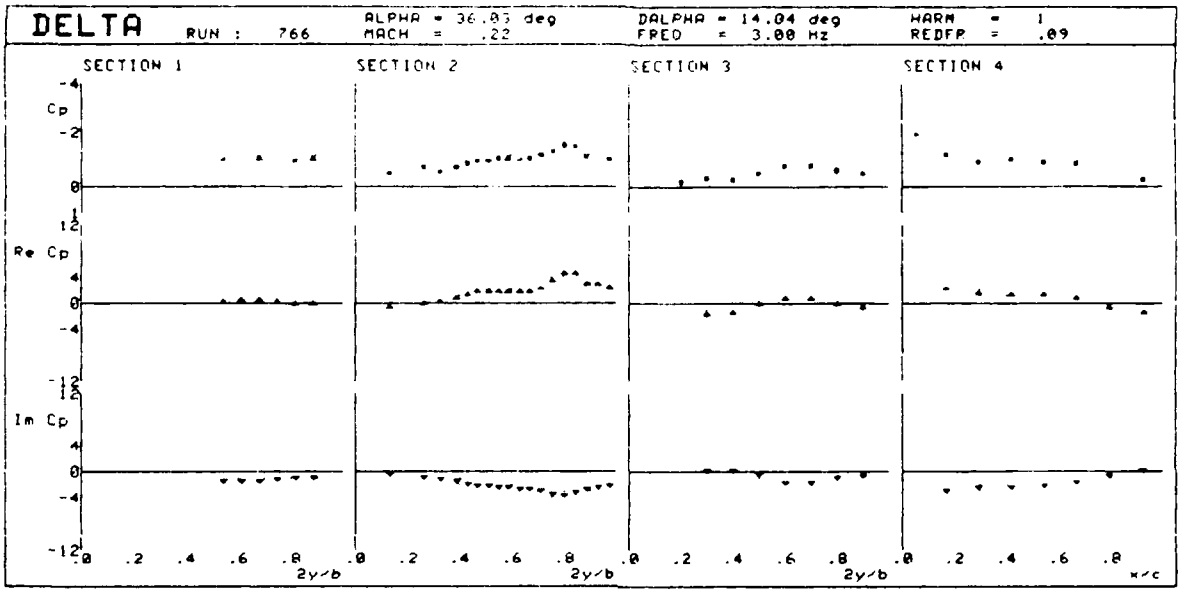

DELTA
RUN : 761
ALPHA = 35.85 deg
MACH = .22
DALPHA = 3.37 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

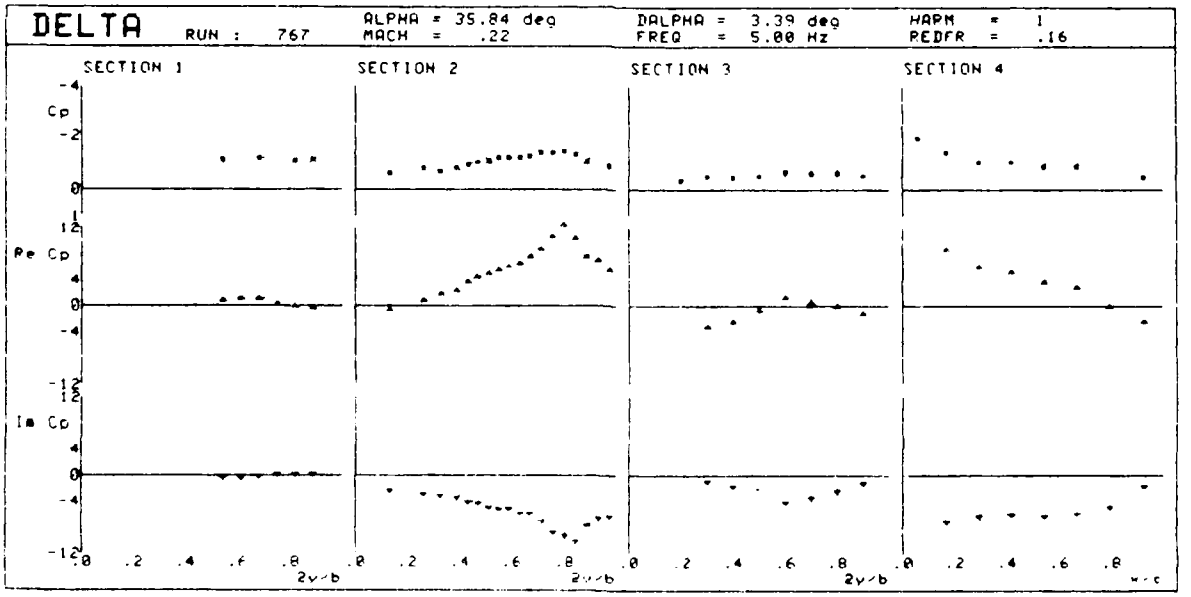

DELTA
RUN : 762
ALPHA = 35.89 deg
MACH = .22
DALPHA = 6.78 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

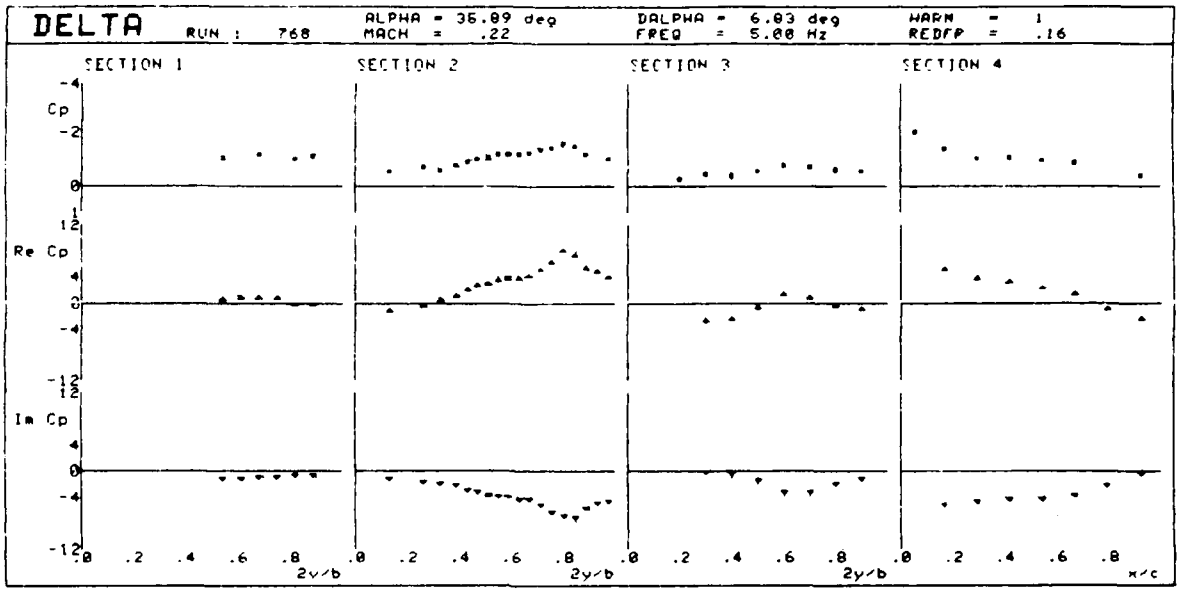

DELTA
RUN : 763
ALPHA = 35.82 deg
MACH = .22
DALPHA = 1.68 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .51
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

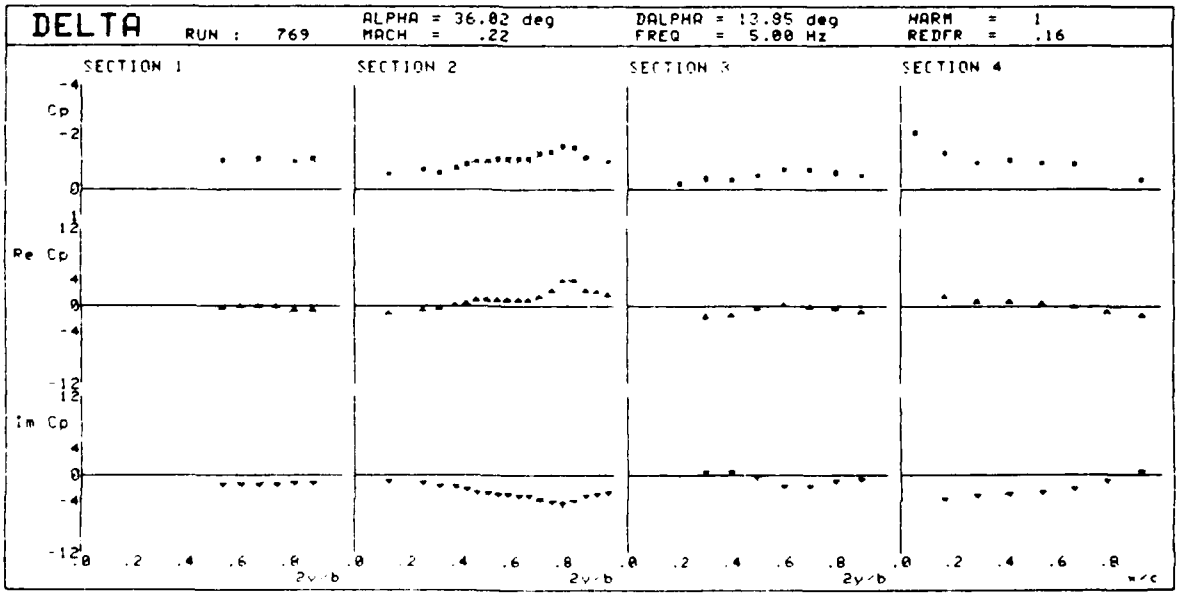

DELTA
RUN : 764
ALPHA = 36.02 deg
MACH = .22
DALPHA = 3.45 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

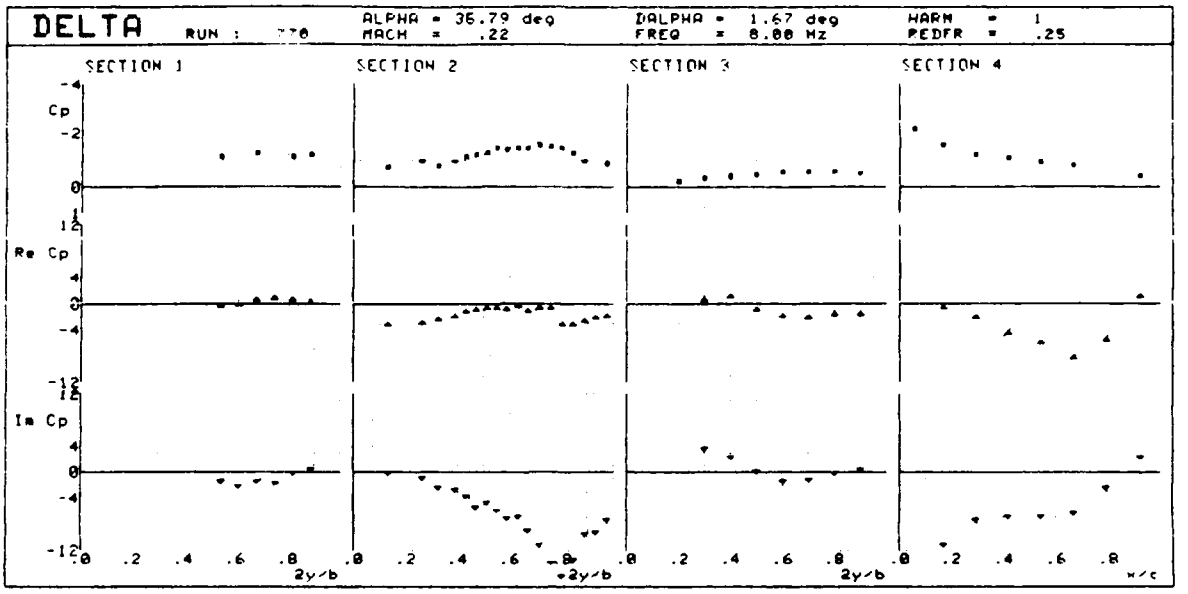

DELTA
RUN : 765
ALPHA = 35.96 deg
MACH = .22
DALPHA = 6.91 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

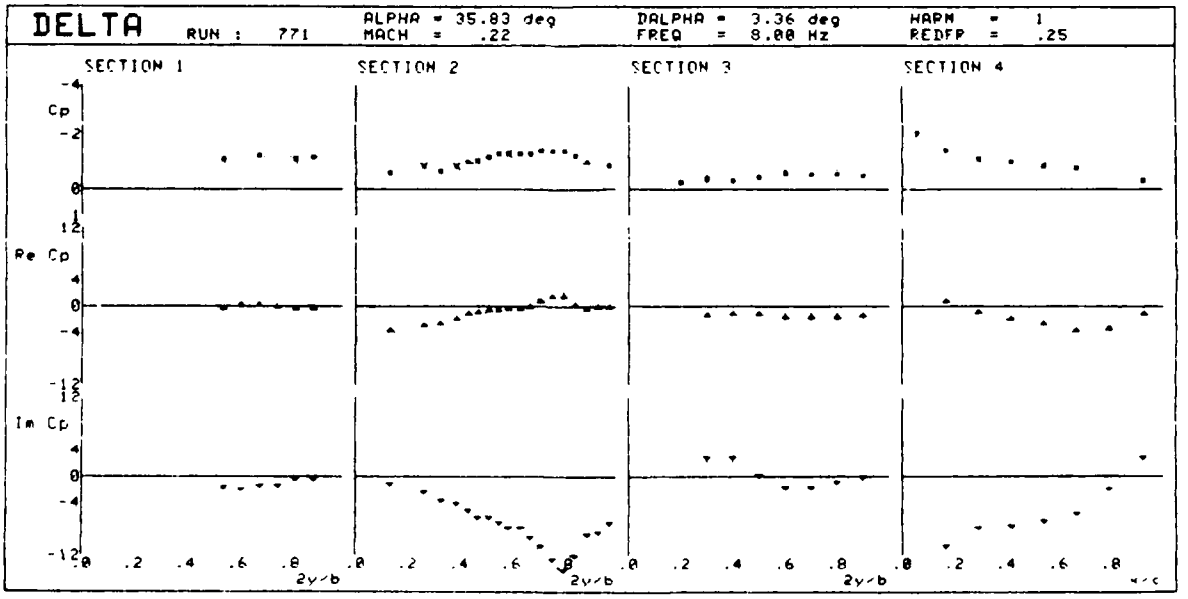

DELTA
RUN : 766
ALPHA = 36.03 deg
MACH = .22
DALPHA = 14.04 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

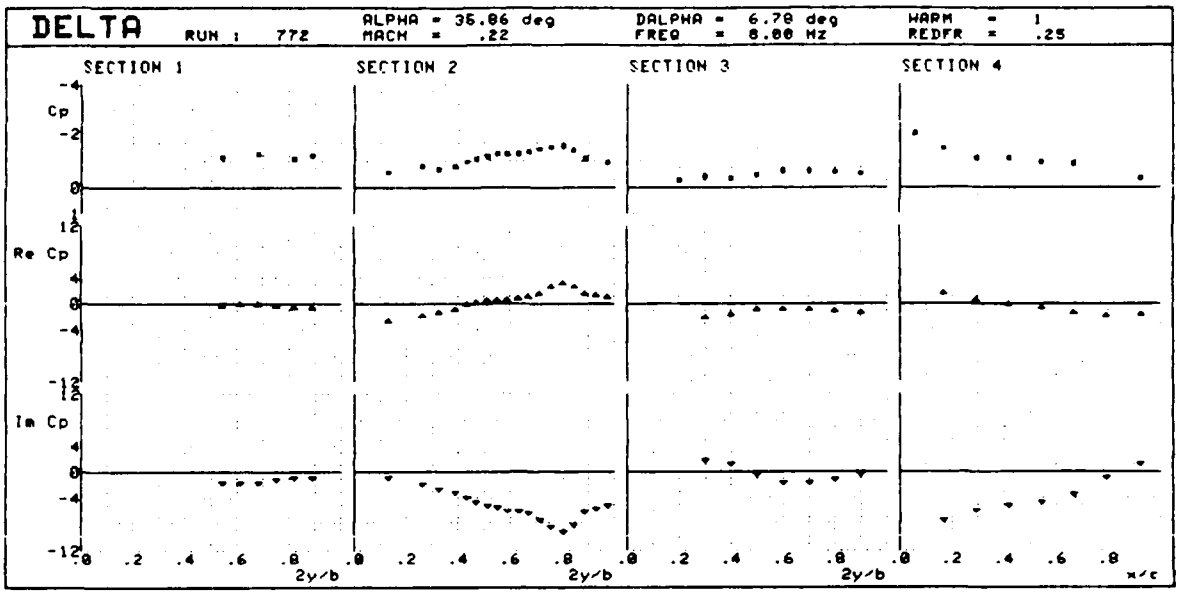

DELTA
RUN : 767
ALPHA = 35.84 deg
MACH = .22
DALPHA = 3.39 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

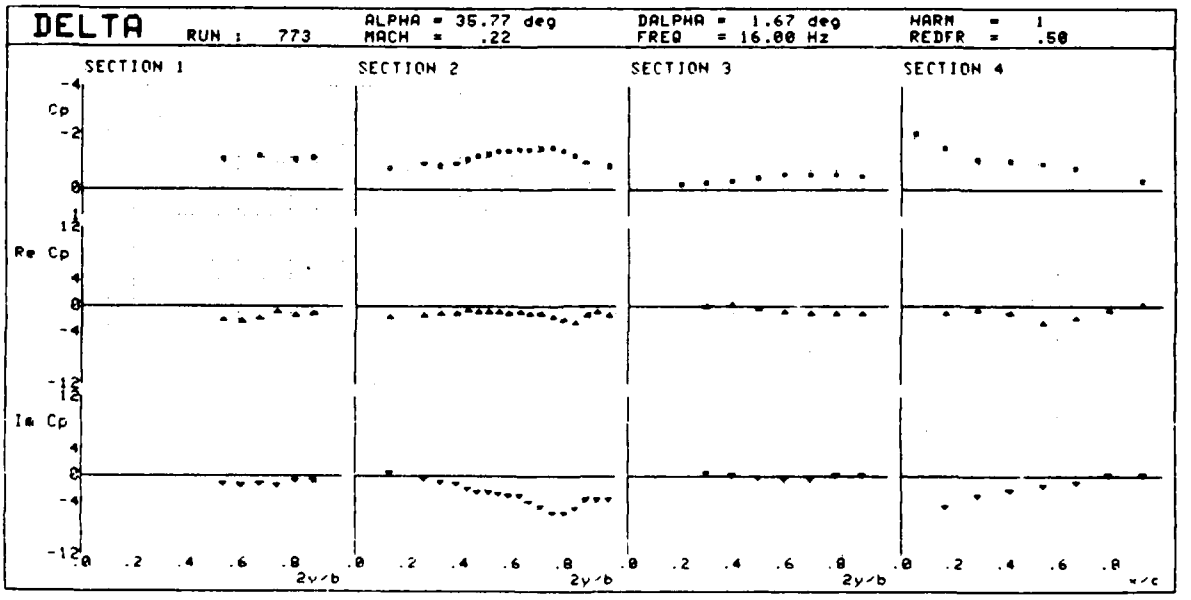

DELTA
RUN : 768
ALPHA = 35.89 deg
MACH = .22
DALPHA = 6.03 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

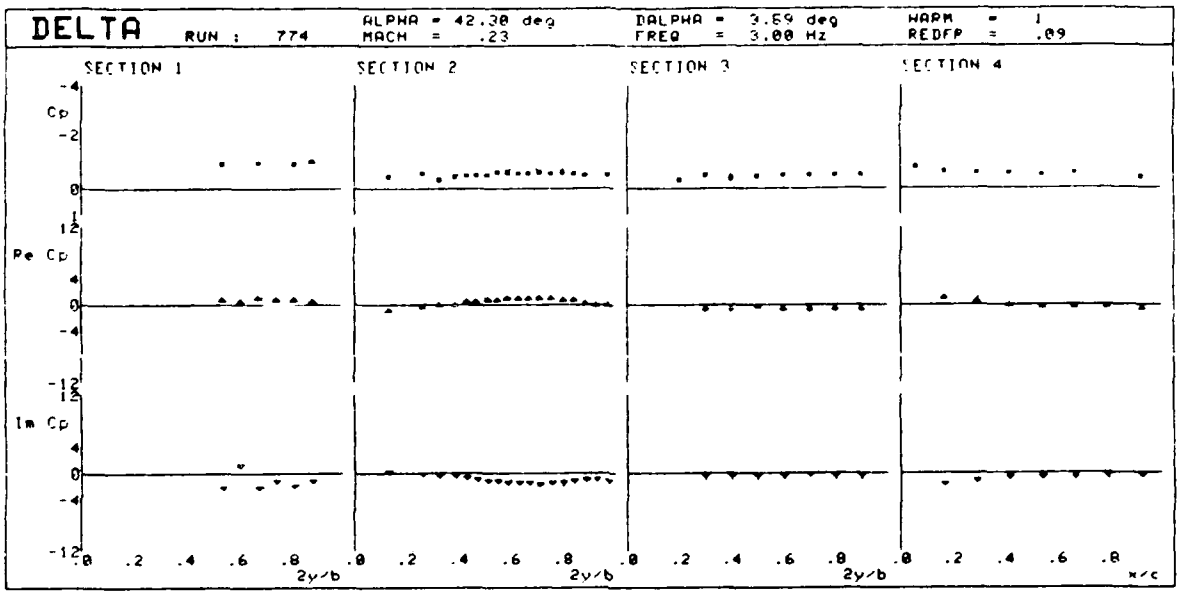

DELTA
RUN : 769
ALPHA = 36.02 deg
MACH = .22
DALPHA = 13.95 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

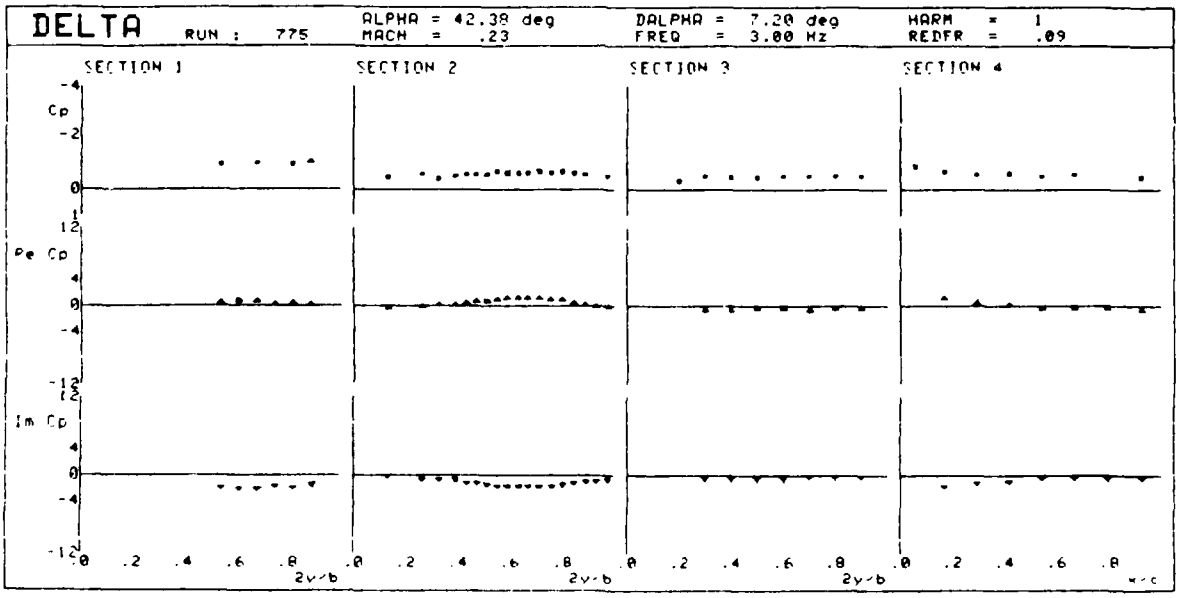

DELTA
RUN : 770
ALPHA = 36.79 deg
MACH = .22
DALPHA = 1.67 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

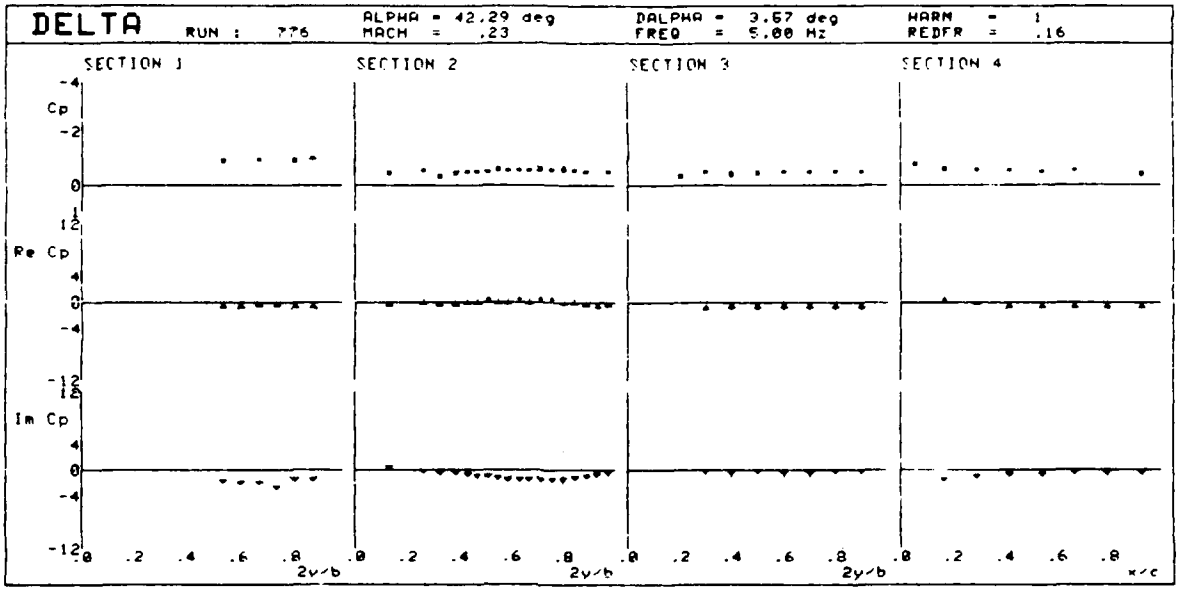

DELTA
RUN : 771
ALPHA = 35.83 deg
MACH = .22
DALPHA = 3.36 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

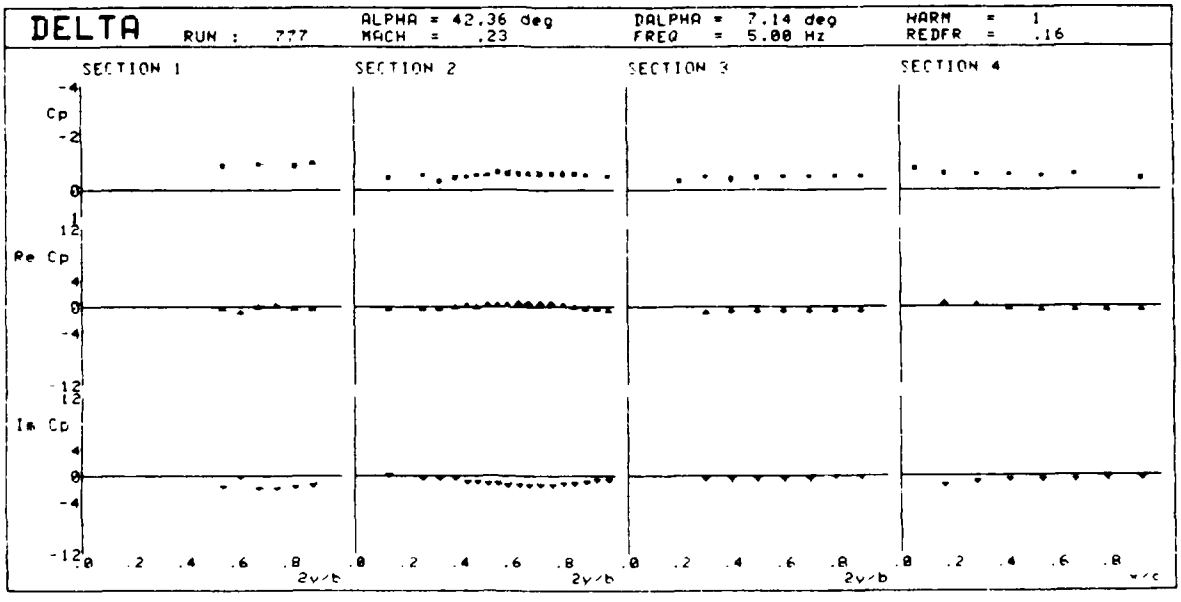

DELTA
RUN : 772
ALPHA = 35.86 deg
MACH = .22
DALPHA = 6.78 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

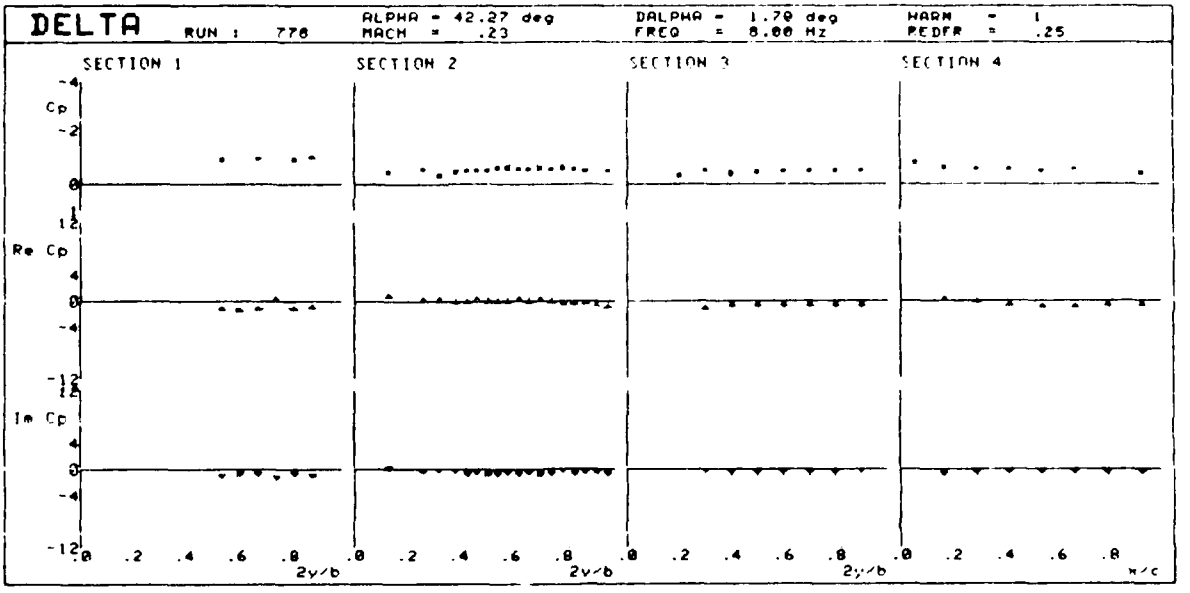

DELTA
RUN : 773
ALPHA = 35.77 deg
MACH = .22
DALPHA = 1.67 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

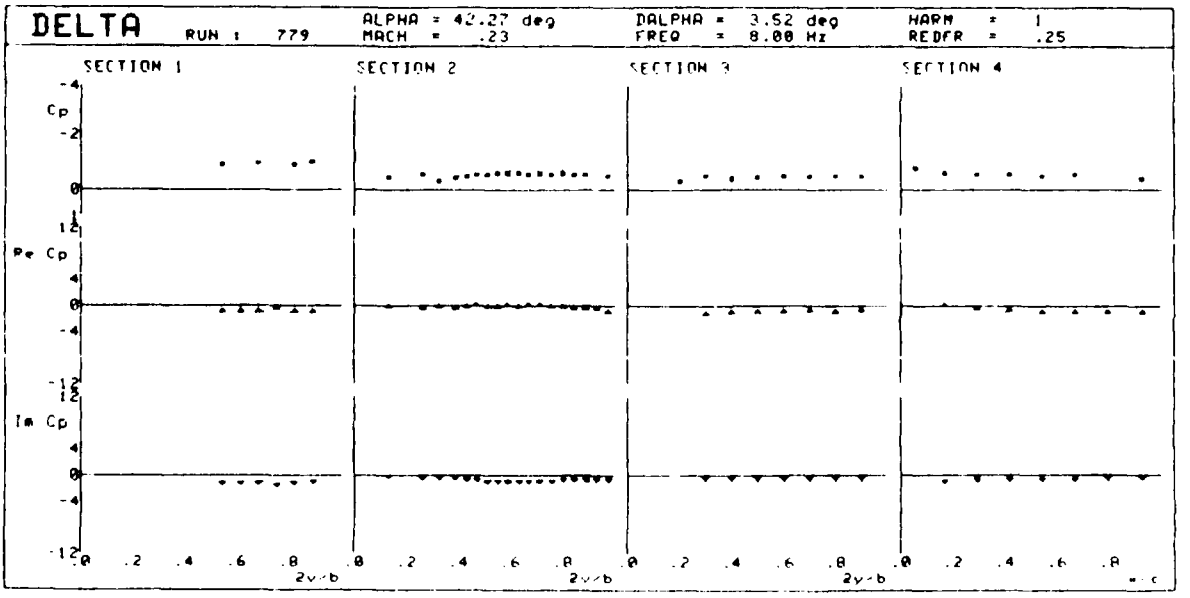

DELTA
RUN : 774
ALPHA = 42.38 deg
MACH = .23
DALPHA = 3.69 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

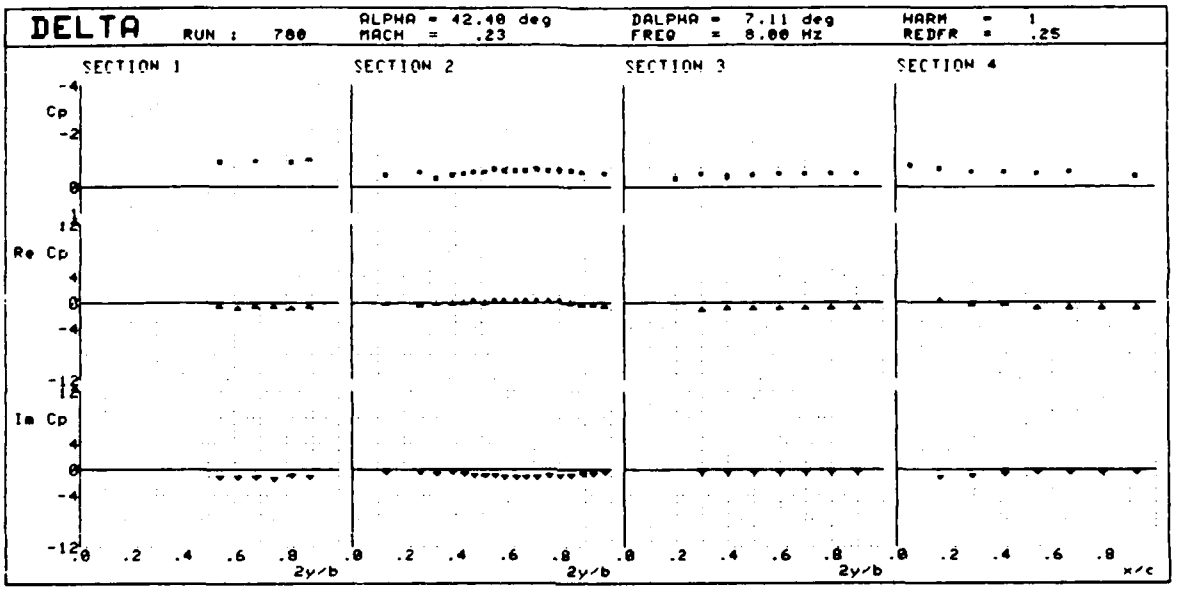

DELTA
RUN : 775
ALPHA = 42.38 deg
MACH = .23
DALPHA = 7.20 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

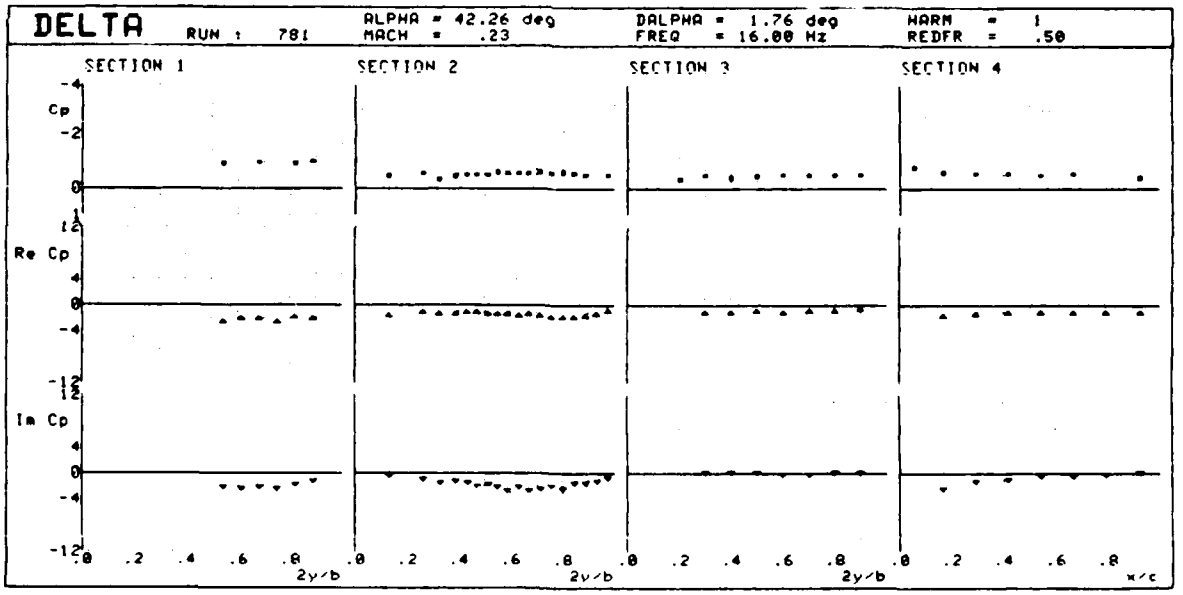

DELTA
RUN : 776
ALPHA = 42.29 deg
MACH = .23
DALPHA = 3.67 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

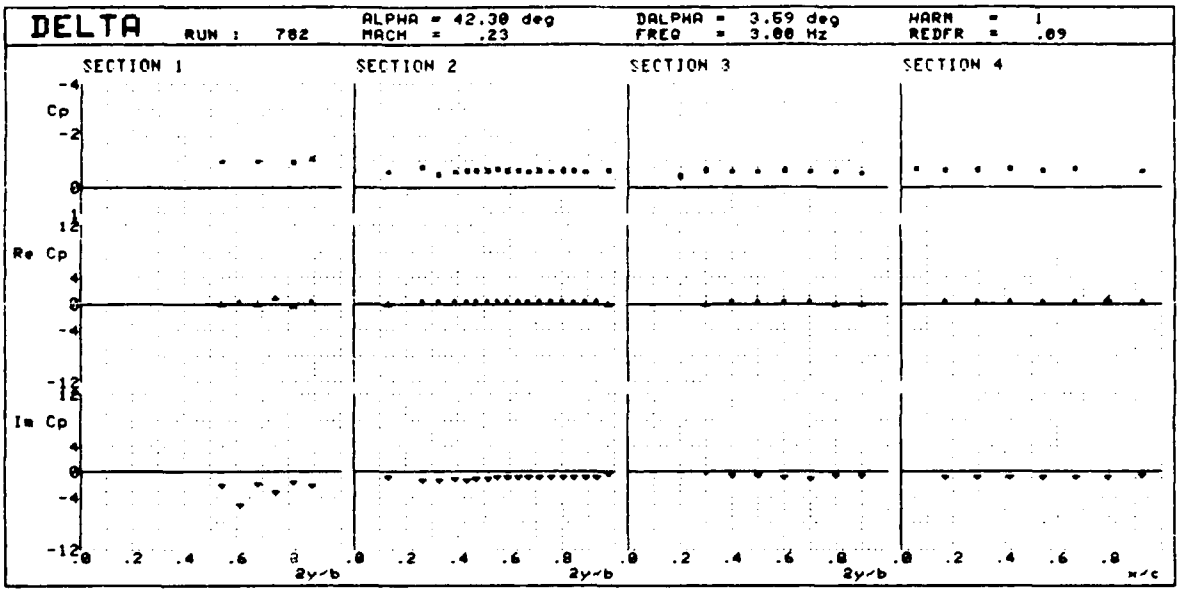

DELTA
RUN : 777
ALPHA = 42.36 deg
MACH = .23
DALPHA = 7.14 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

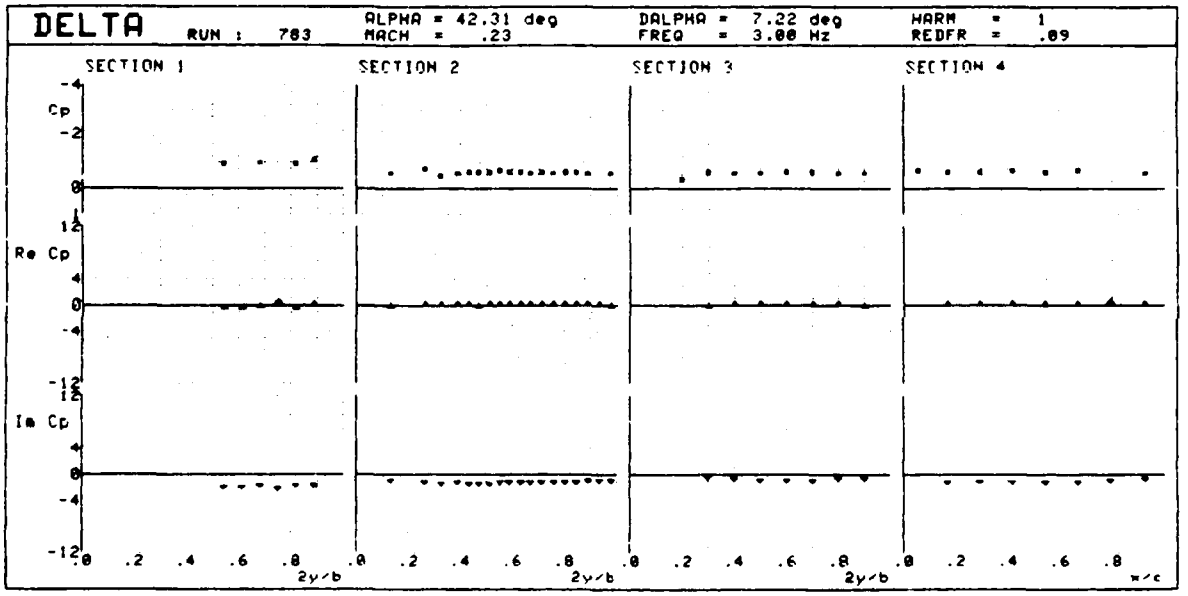

DELTA
RUN : 778
ALPHA = 42.27 deg
MACH = .23
DALPHA = 1.70 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

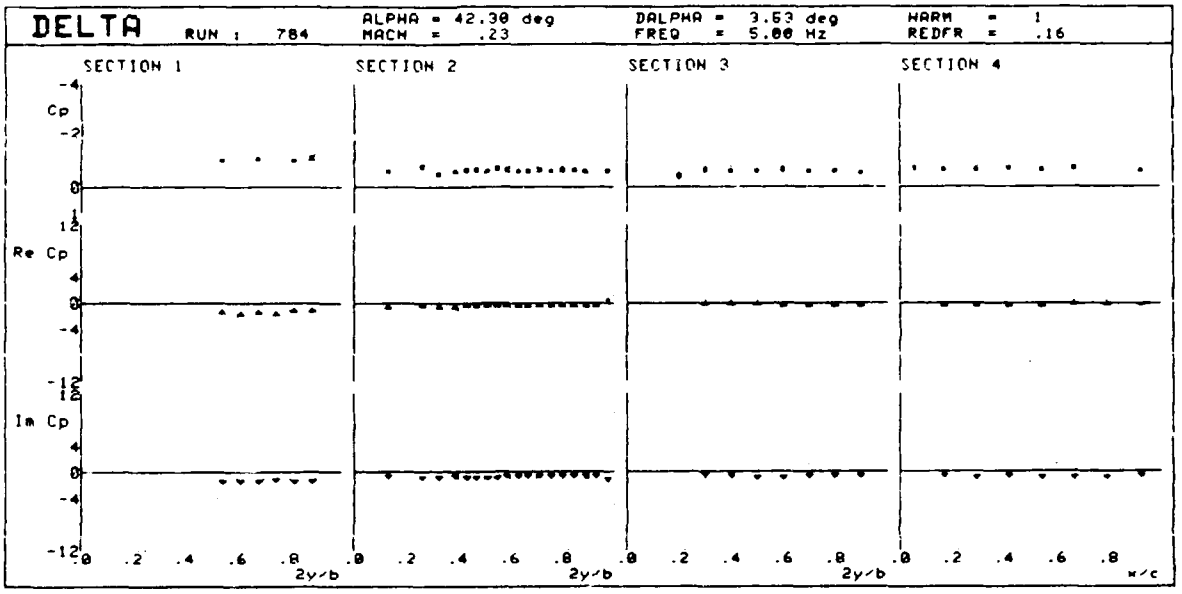

DELTA
RUN : 779
ALPHA = 42.27 deg
MACH = .23
DALPHA = 3.52 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

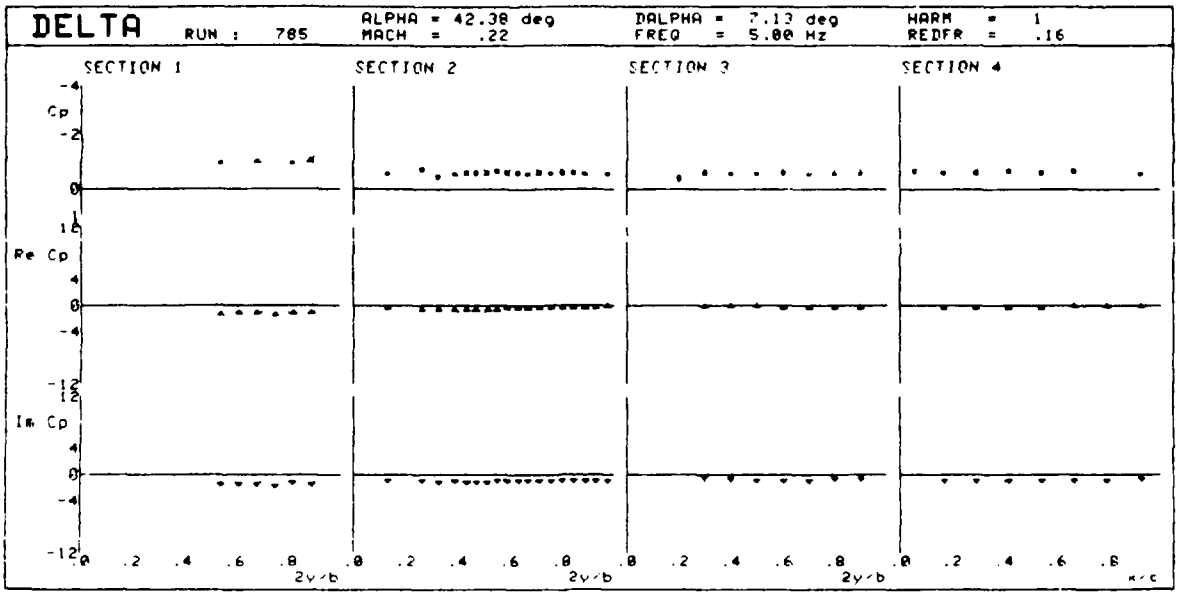

DELTA
RUN : 780
ALPHA = 42.40 deg
MACH = .23
DALPHA = 7.11 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

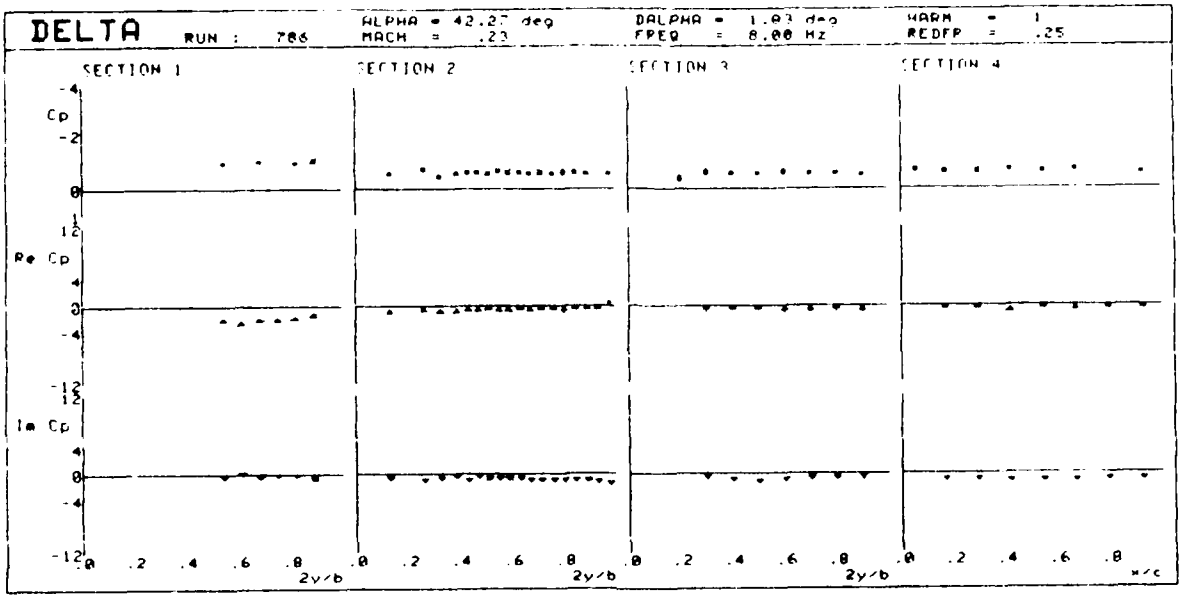

DELTA
RUN : 781
ALPHA = 42.26 deg
MACH = .23
DALPHA = 1.76 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

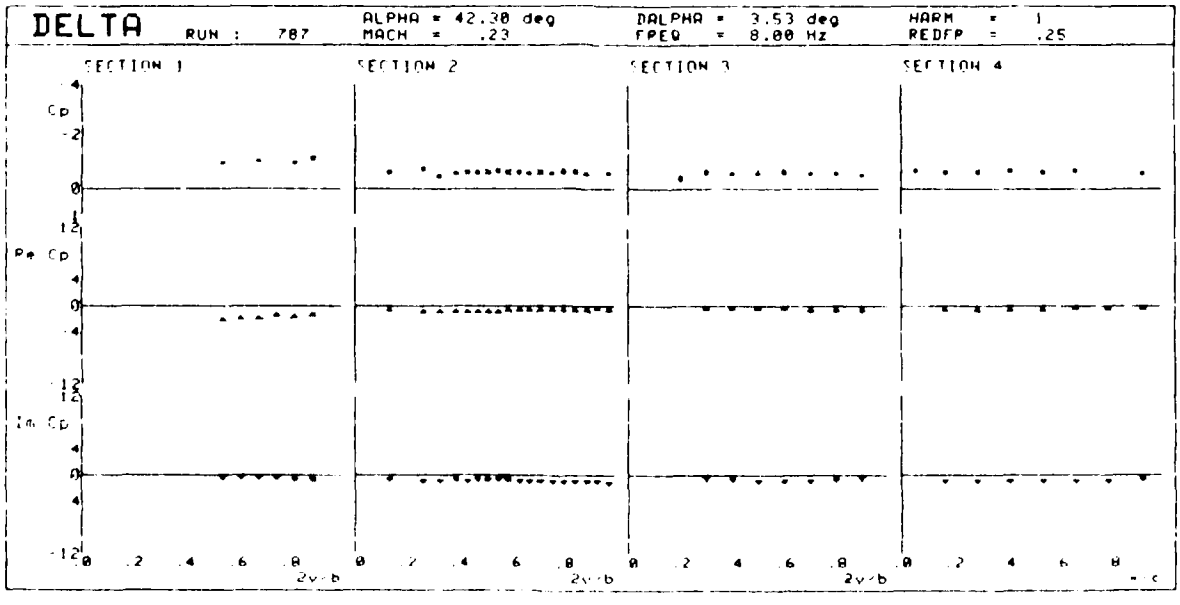

DELTA
RUN : 782
ALPHA = 42.30 deg
MACH = .23
DALPHA = 3.59 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

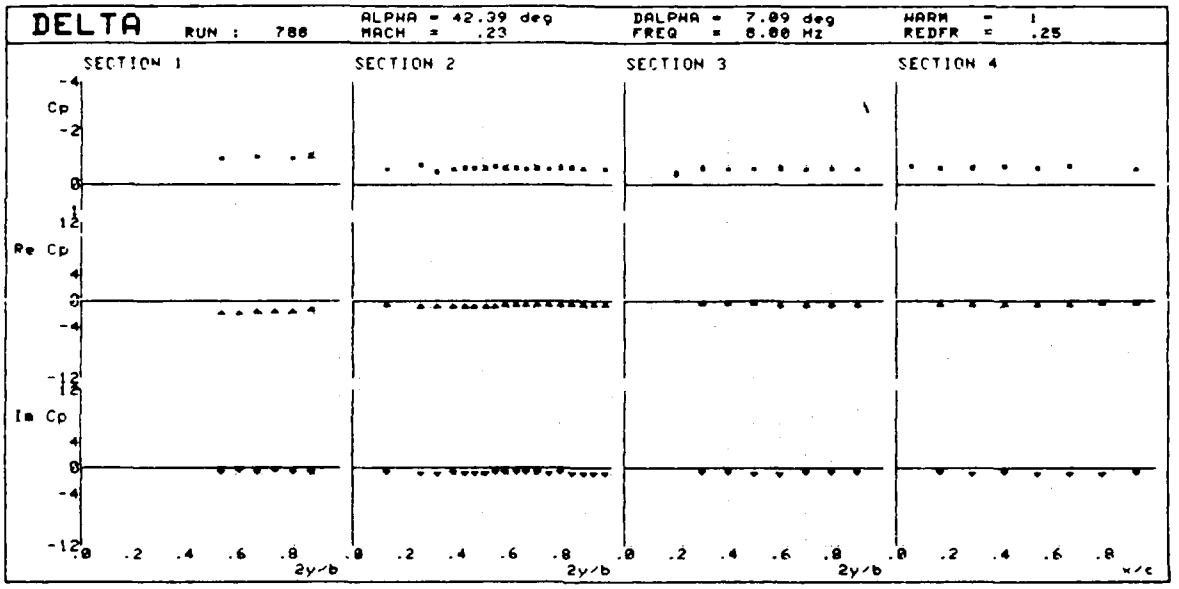

DELTA
RUN : 783
ALPHA = 42.31 deg
MACH = .23
DALPHA = 7.22 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

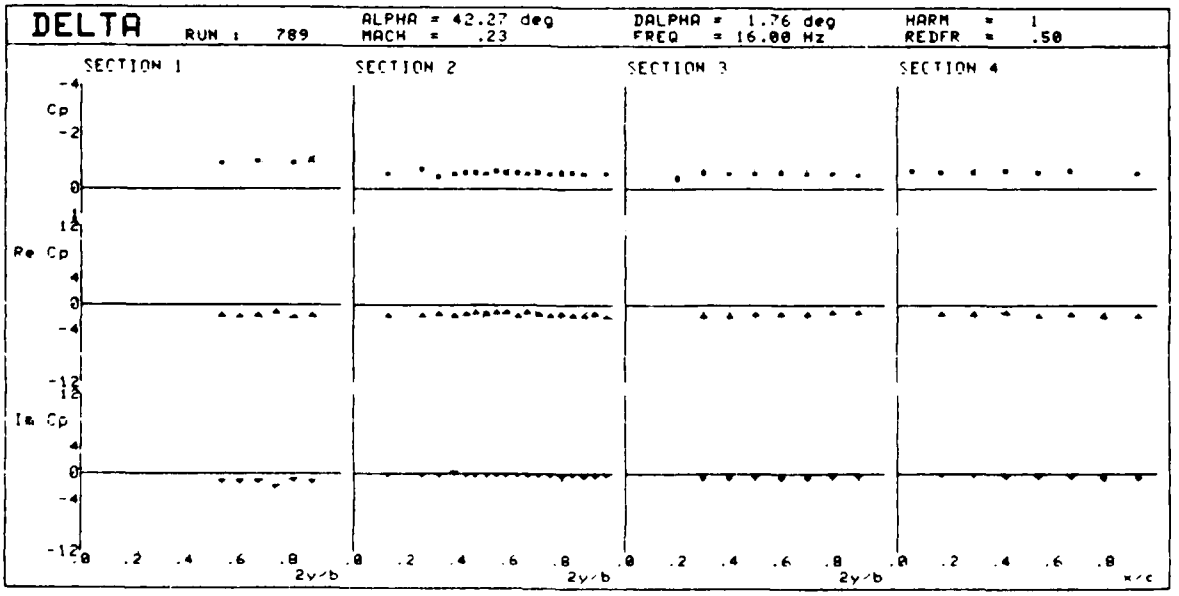

DELTA
RUN : 784
ALPHA = 42.30 deg
MACH = .23
DALPHA = 3.53 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

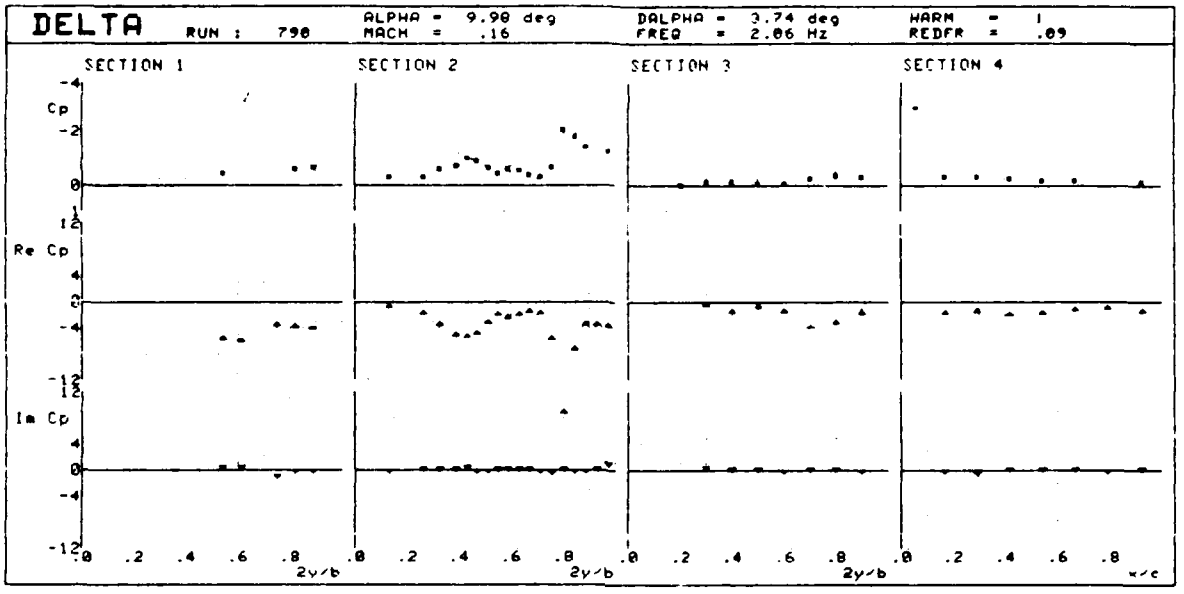

DELTA
RUN : 785
ALPHA = 42.38 deg
MACH = .22
DALPHA = 7.13 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

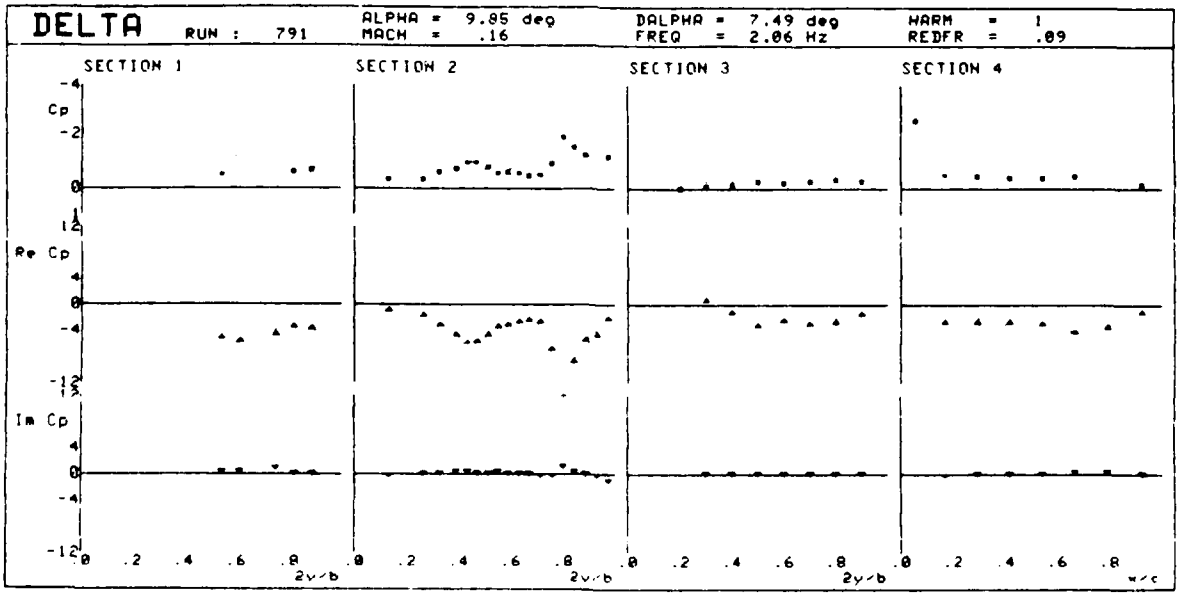

DELTA
RUN : 786
ALPHA = 42.27 deg
MACH = .23
DALPHA = 1.83 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

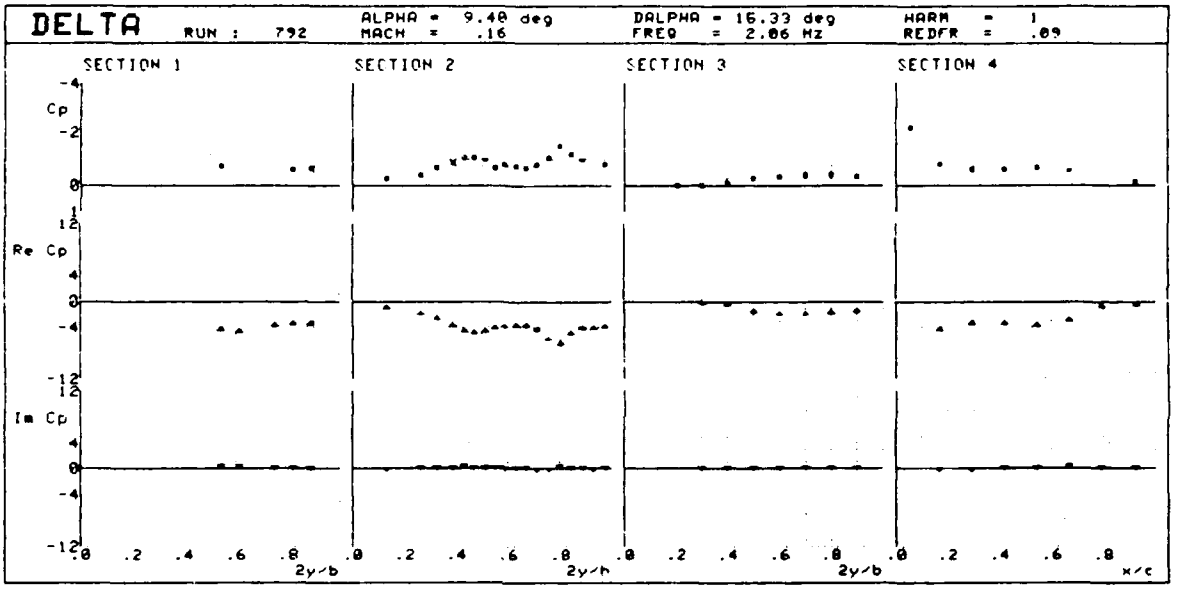

DELTA
RUN : 787
ALPHA = 42.30 deg
MACH = .23
DALPHA = 3.53 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

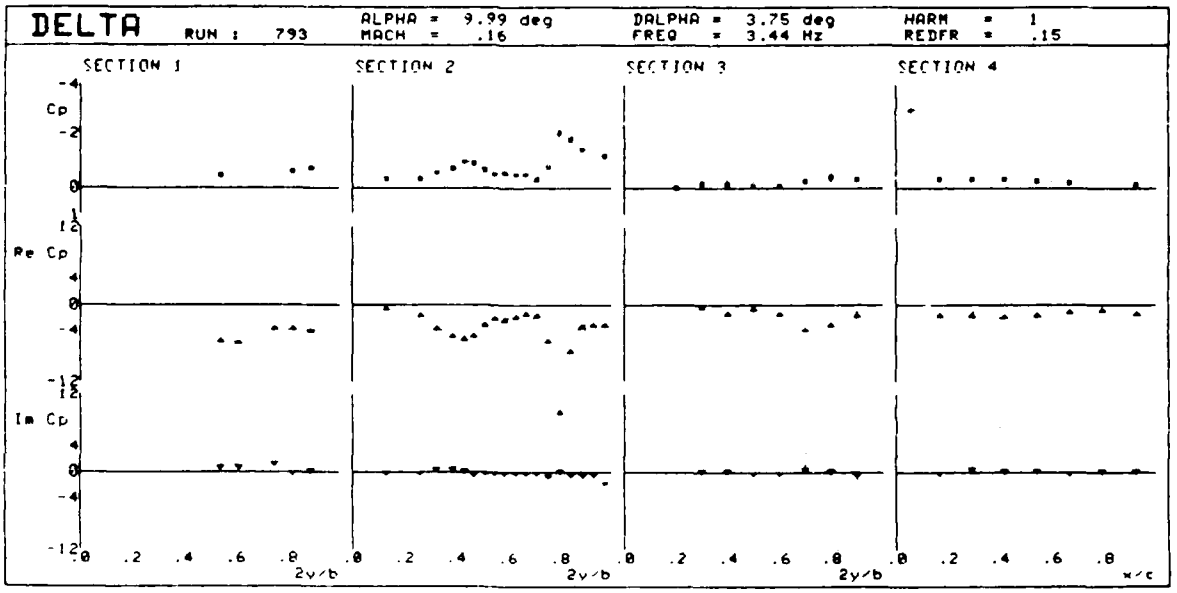

DELTA
RUN : 788
ALPHA = 42.39 deg
MACH = .23
DALPHA = 7.09 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

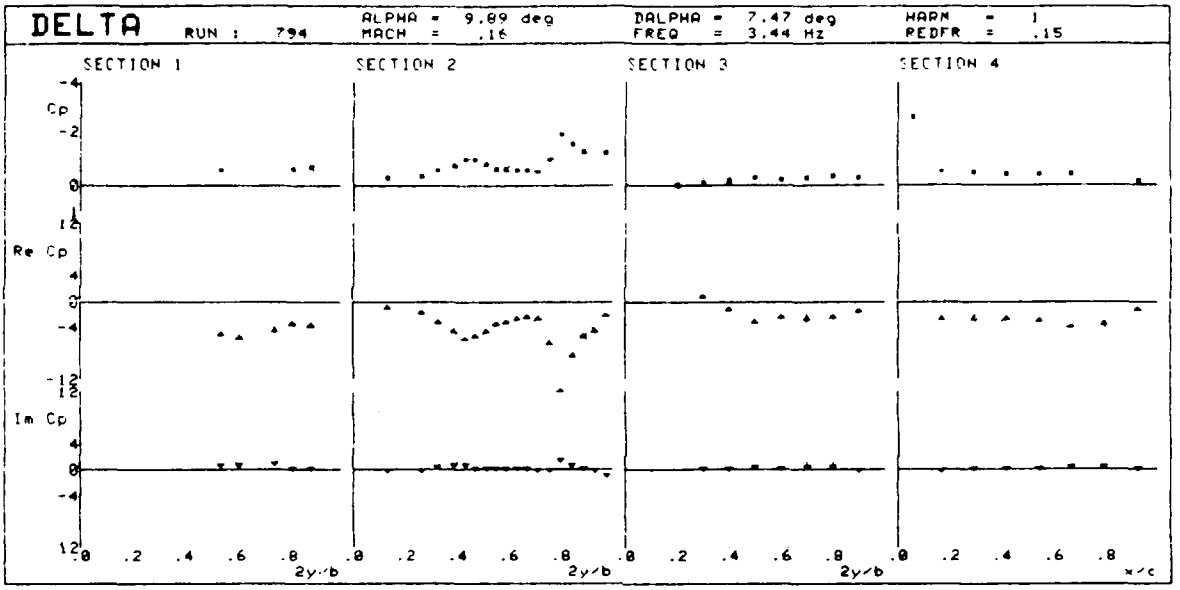

DELTA
RUN : 789
ALPHA = 42.27 deg
MACH = .23
DALPHA = 1.76 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

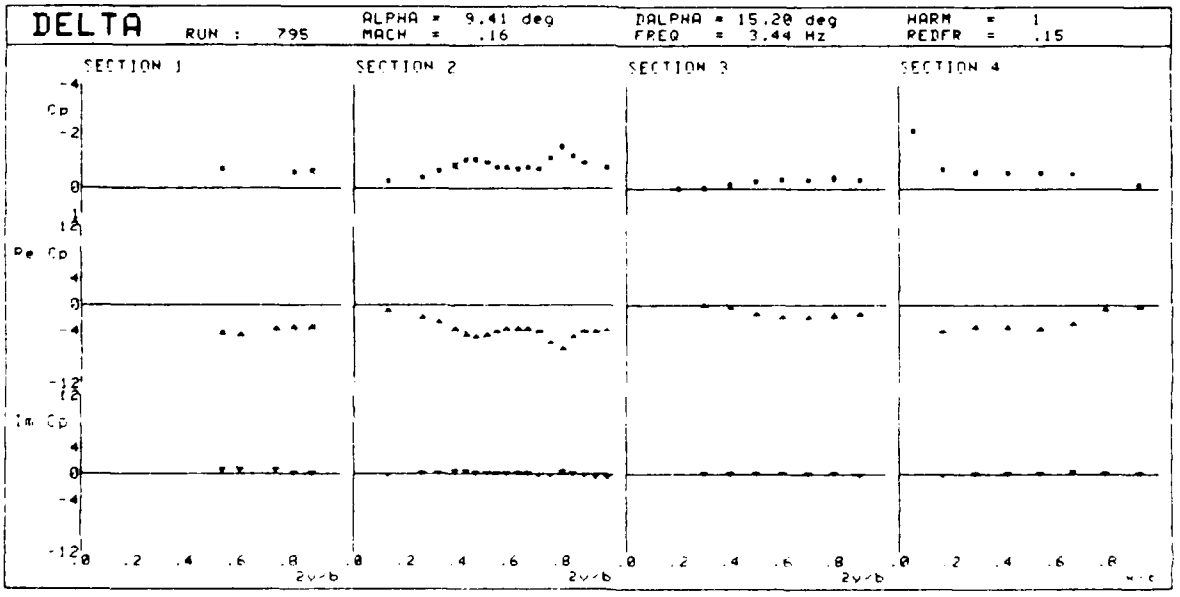

DELTA
RUN : 790
ALPHA = 9.90 deg
MACH = .16
DALPHA = 3.74 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

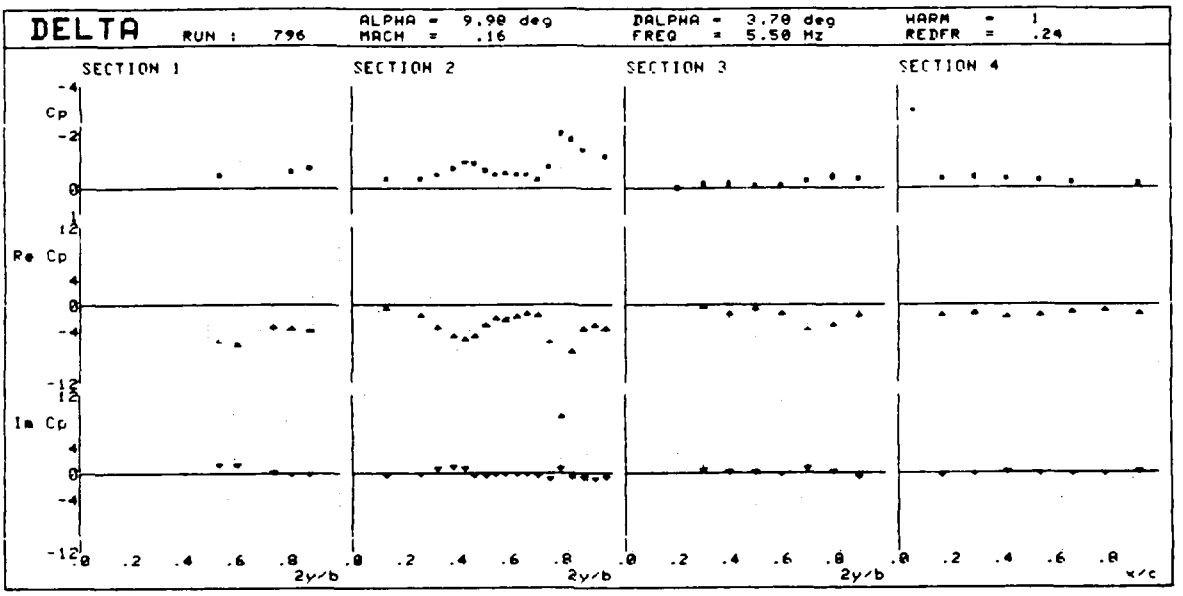

DELTA
RUN : 791
ALPHA = 9.85 deg
MACH = .16
DALPHA = 7.49 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

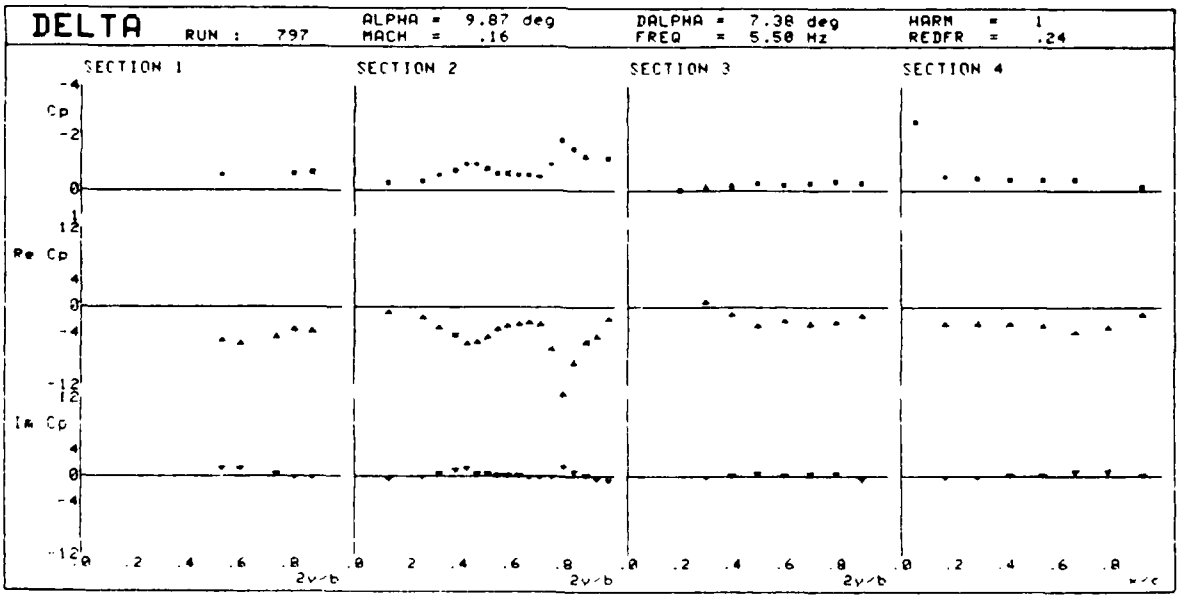

DELTA
RUN : 792
ALPHA = 9.40 deg
MACH = .16
DALPHA = 16.33 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

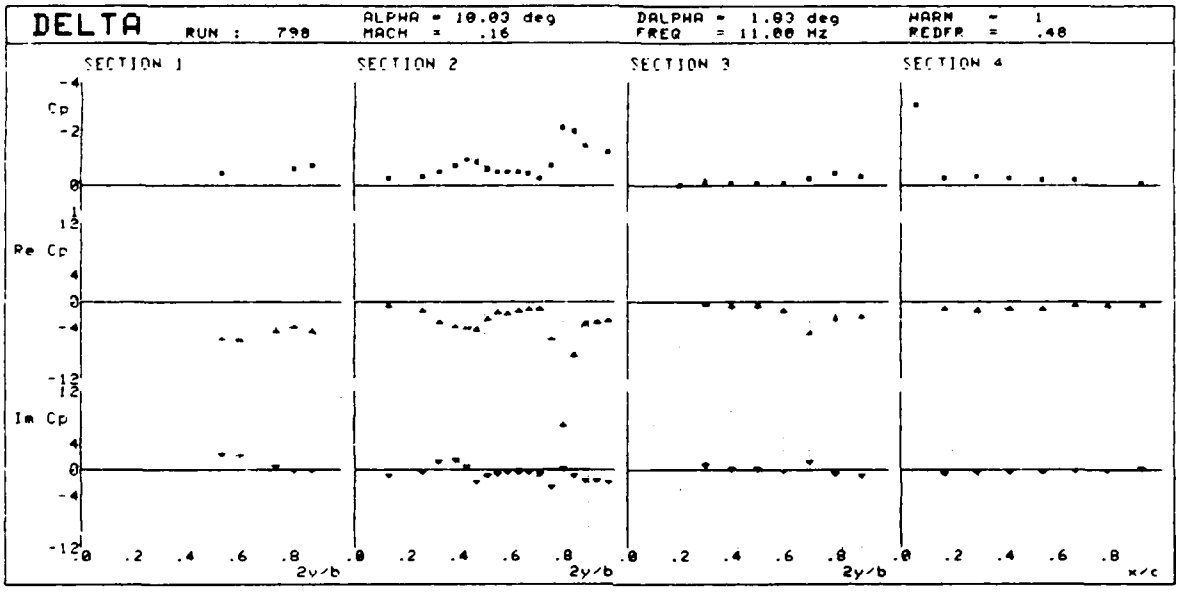

DELTA
RUN : 793
ALPHA = 9.99 deg
MACH = .16
DALPHA = 3.75 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

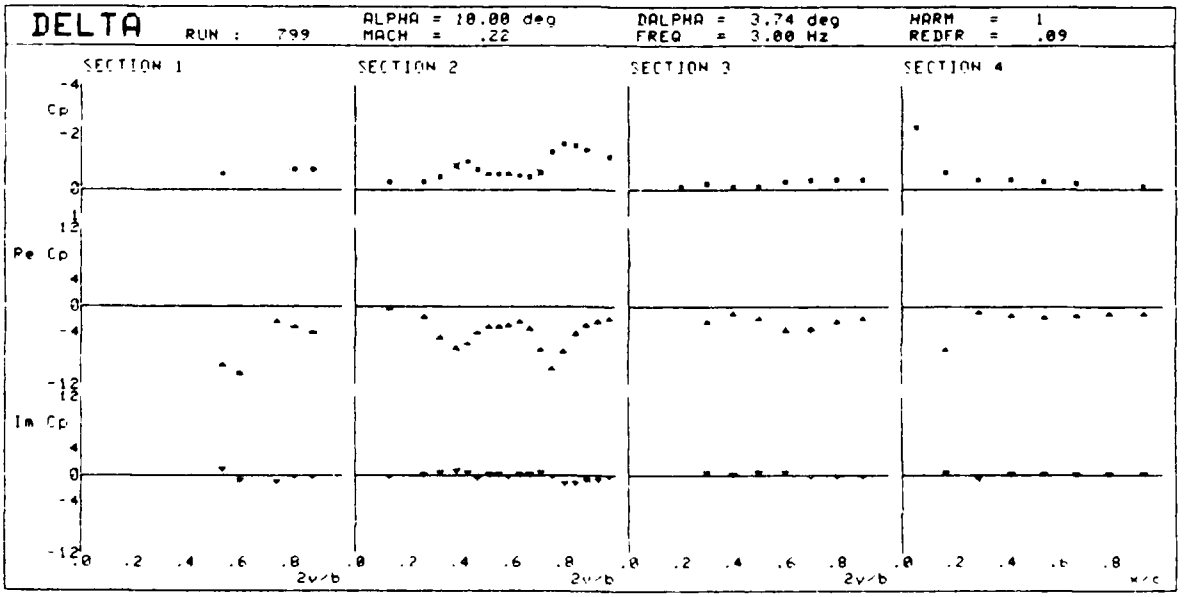

DELTA
RUN : 794
ALPHA = 9.09 deg
MACH = .16
DALPHA = 7.47 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

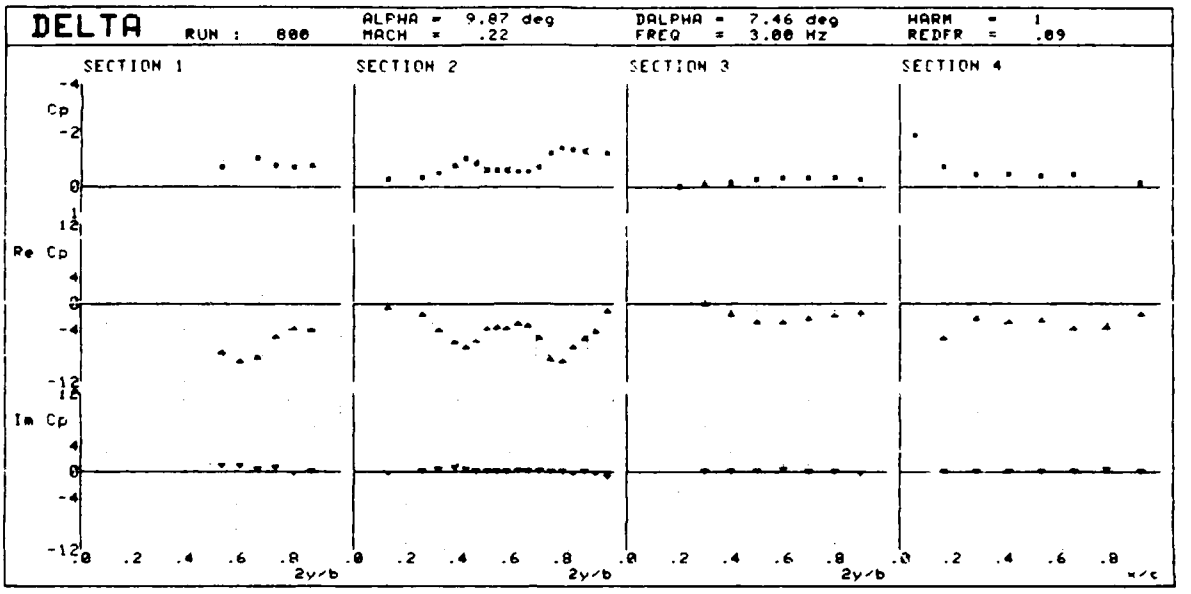

DELTA
RUN : 795
ALPHA = 9.41 deg
MACH = .16
DALPHA = 15.20 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

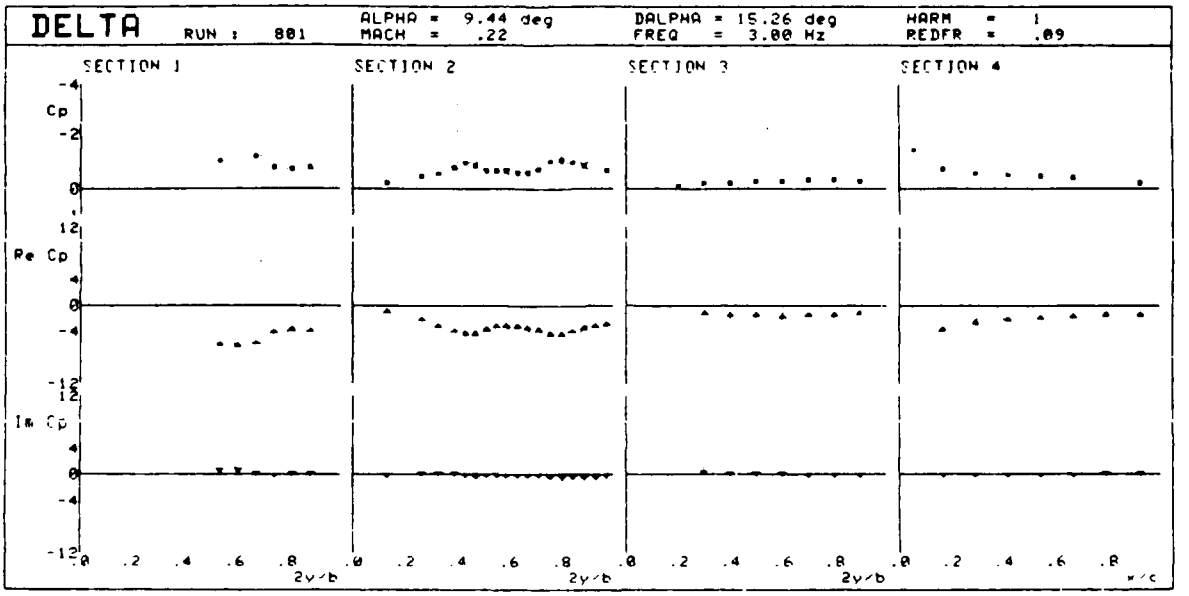

DELTA
RUN : 796
ALPHA = 9.90 deg
MACH = .16
DALPHA = 3.70 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

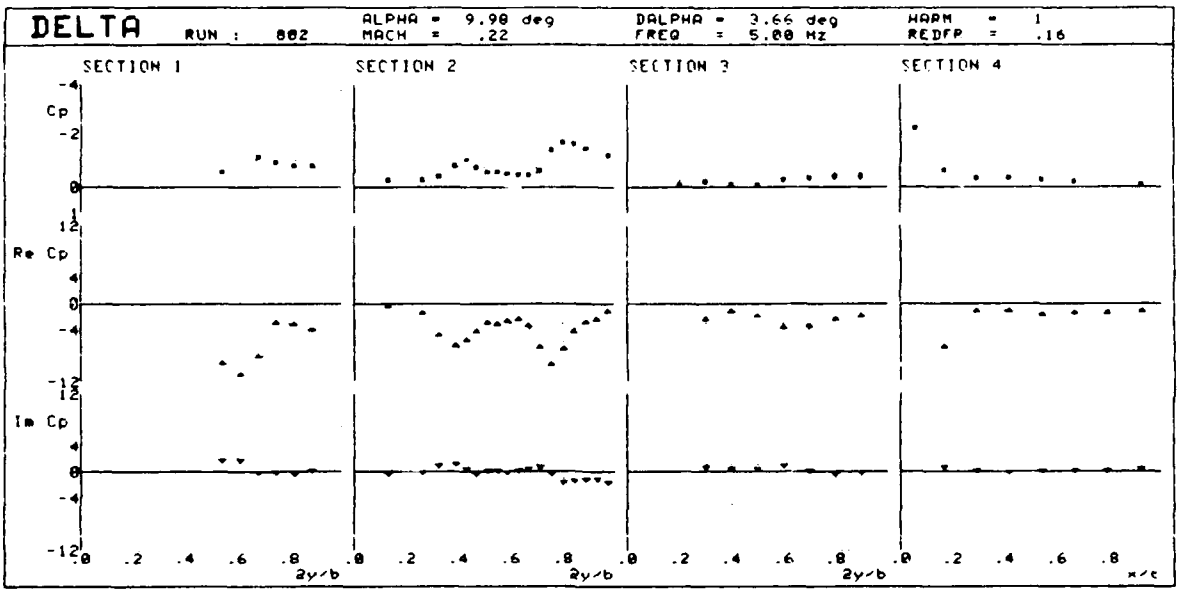

DELTA
RUN : 797
ALPHA = 9.87 deg
MACH = .16
DALPHA = 7.38 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

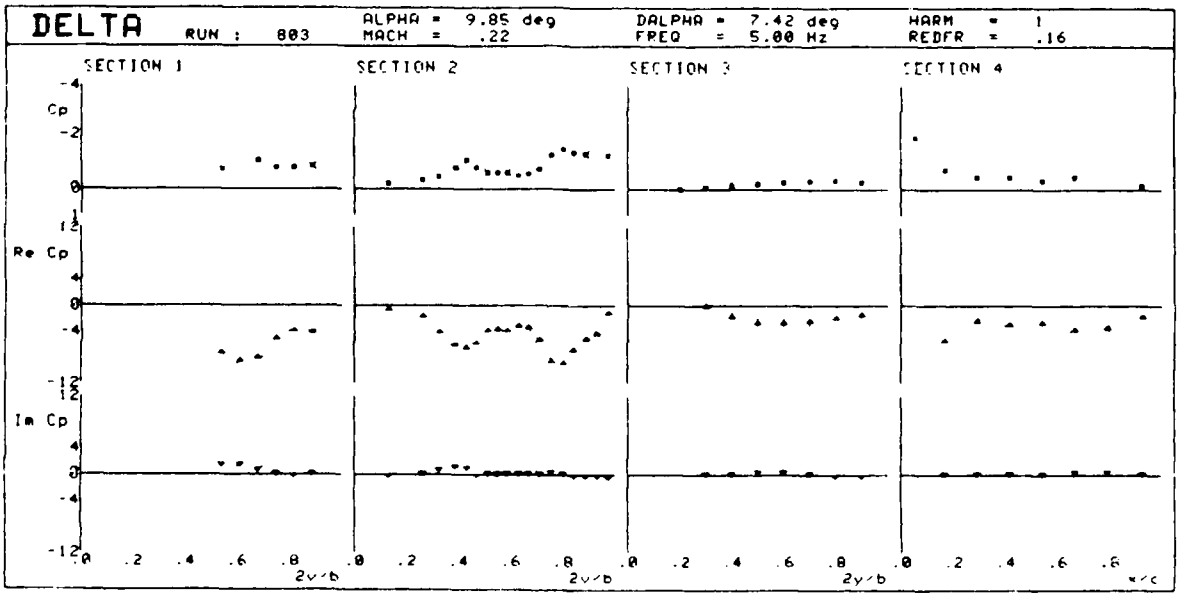

DELTA
RUN : 798
ALPHA = 10.03 deg
MACH = .16
DALPHA = 1.03 deg
FREQ = 11.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

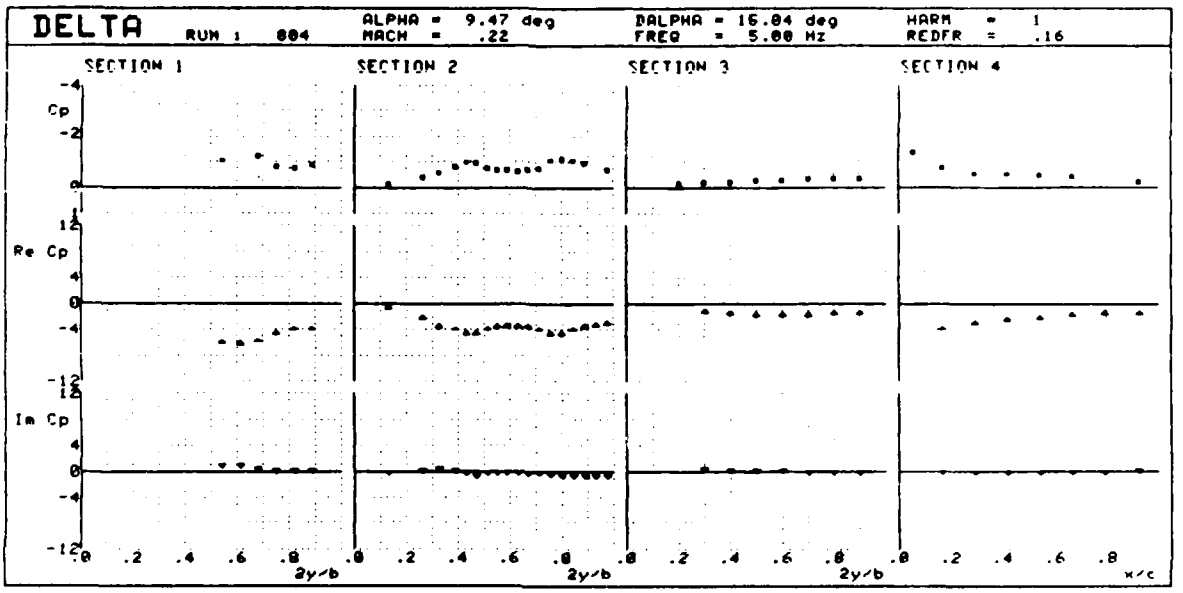

DELTA
RUN : 799
ALPHA = 10.00 deg
MACH = .22
DALPHA = 3.74 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

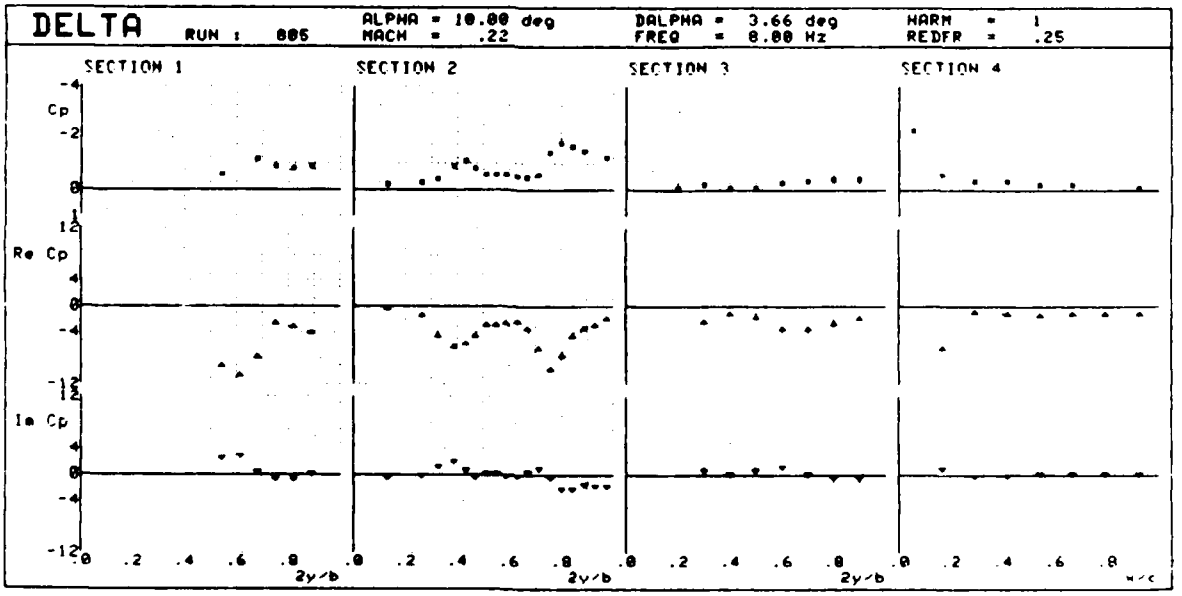

DELTA
RUN : 800
ALPHA = 9.87 deg
MACH = .22
DALPHA = 7.46 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

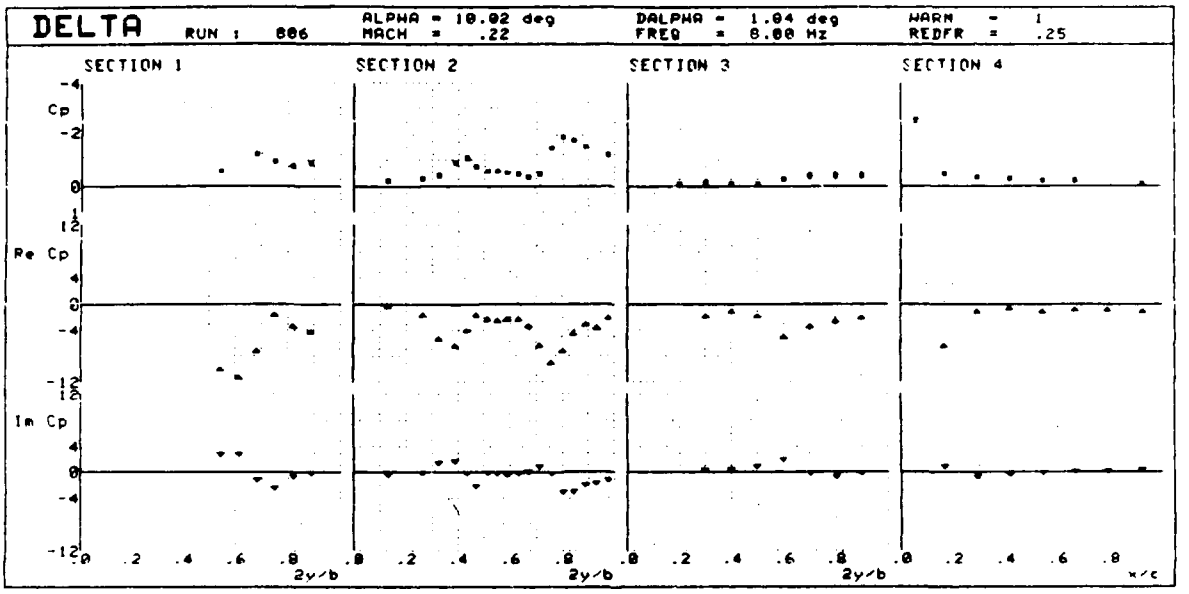

DELTA
RUN : 801
ALPHA = 9.44 deg
MACH = .22
DALPHA = 15.26 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

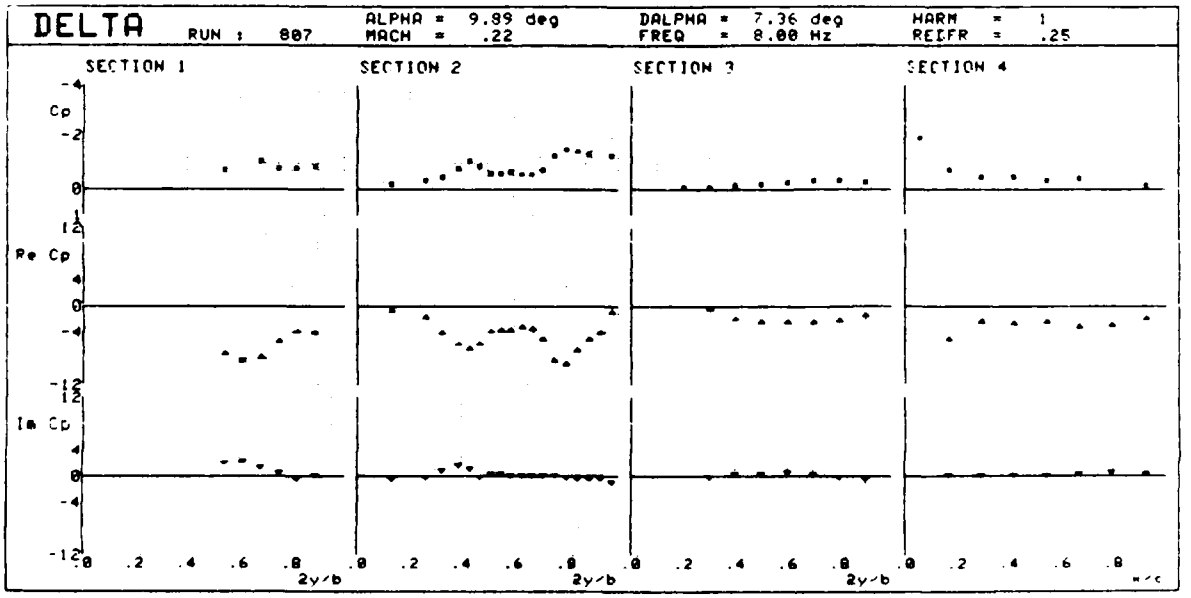

DELTA
RUN : 802
ALPHA = 9.98 deg
MACH = .22
DALPHA = 3.66 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

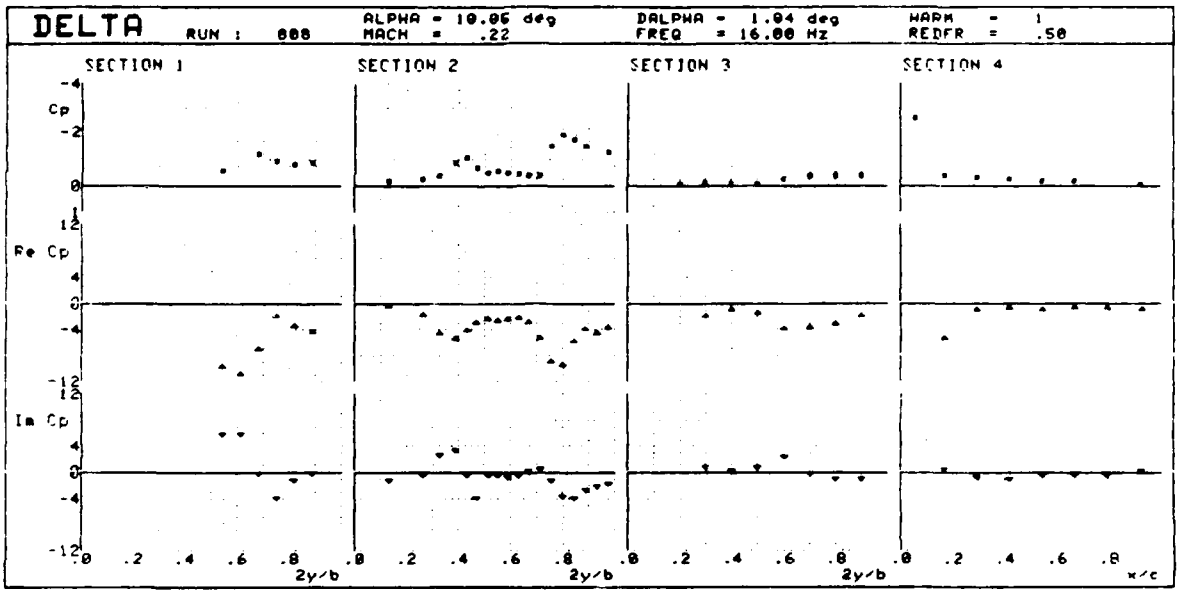

DELTA
RUN : 803
ALPHA = 9.85 deg
MACH = .22
DALPHA = 7.42 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

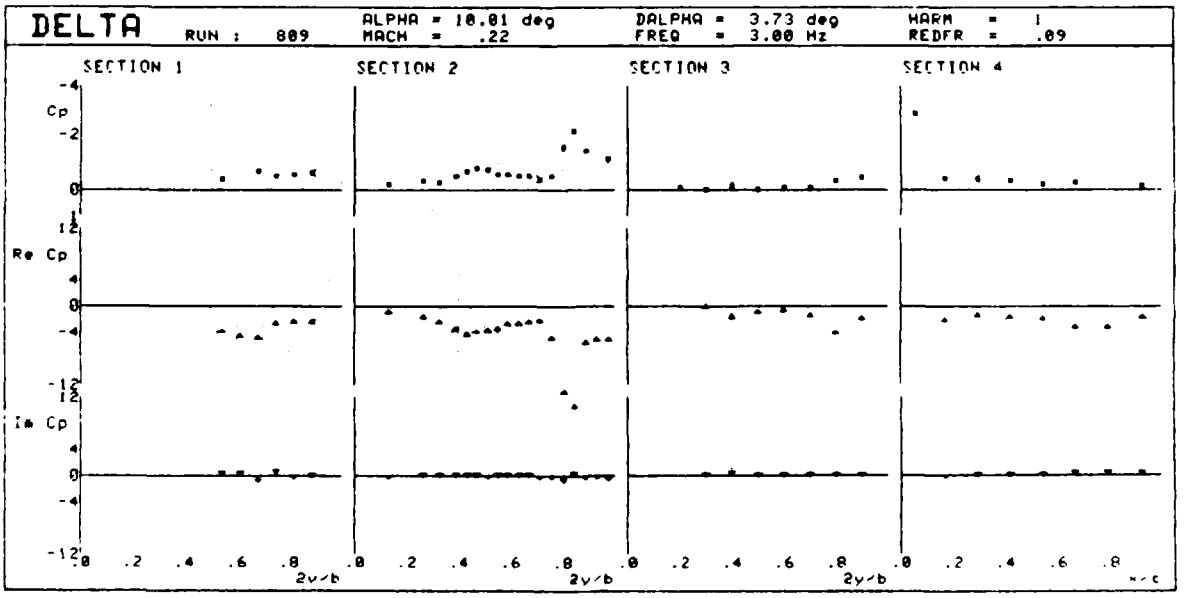

DELTA
RUN : 804
ALPHA = 9.47 deg
MACH = .22
DALPHA = 16.04 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

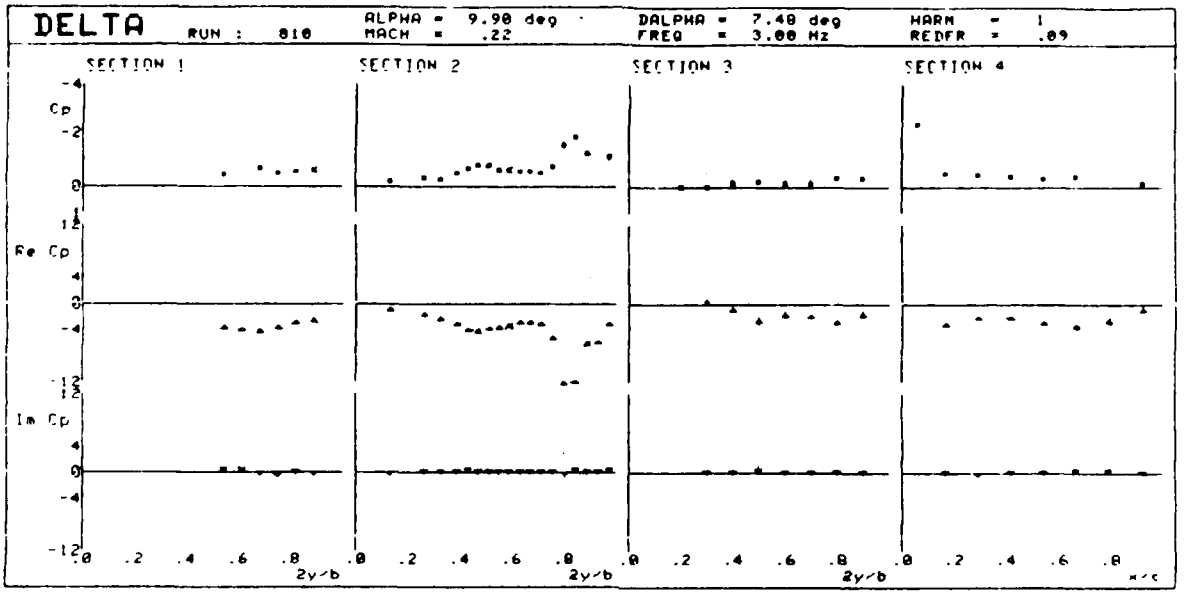

DELTA
RUN : 805
ALPHA = 10.00 deg
MACH = .22
DALPHA = 3.66 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

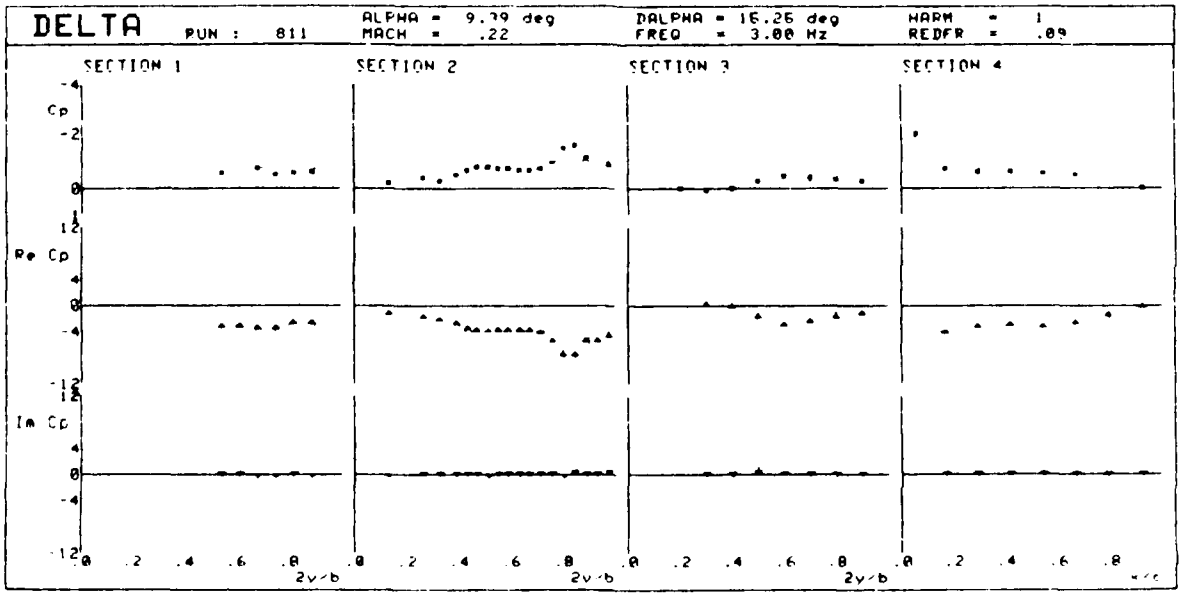

DELTA
RUN : 806
ALPHA = 10.02 deg
MACH = .22
DALPHA = 1.04 deg
FREQ = 8.00 Hz
HARM = 1
REFFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

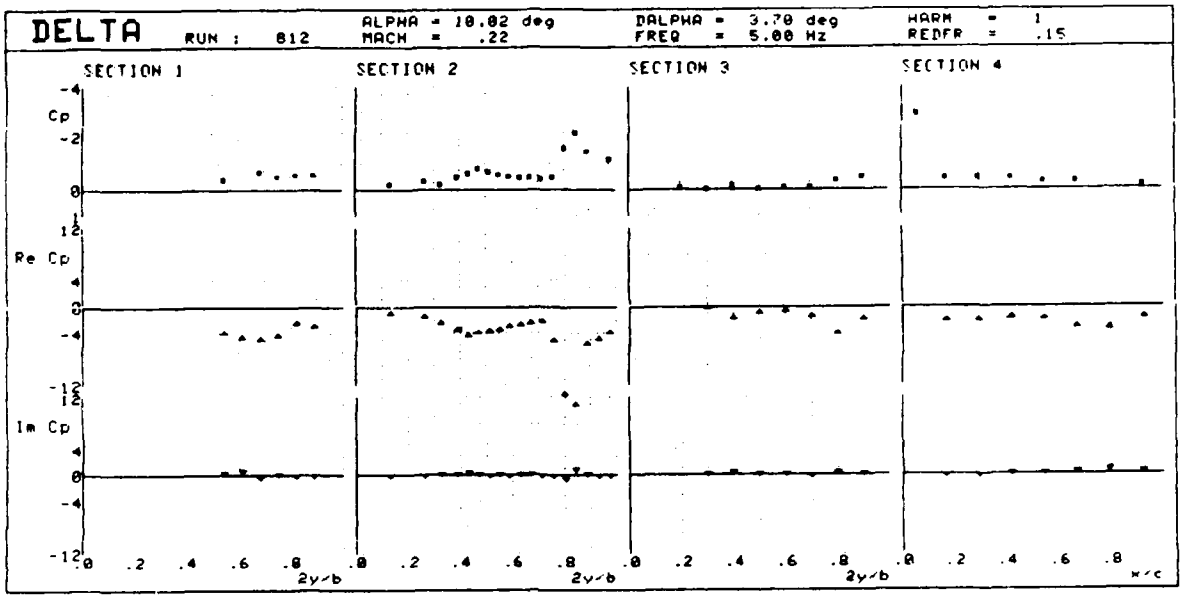

DELTA
RUN : 807
ALPHA = 9.89 deg
MACH = .22
DALPHA = 7.36 deg
FREQ = 8.00 Hz
HARM = 1
REFFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

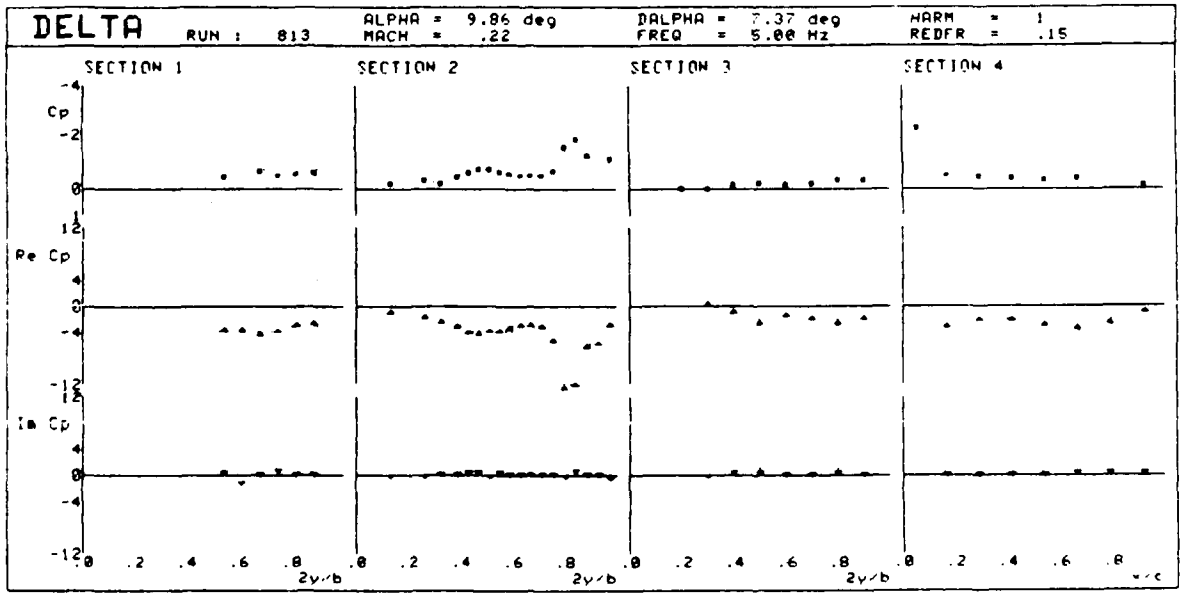

DELTA
RUN : 888
ALPHA = 10.06 deg
MACH = .22
DALPHA = 1.04 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

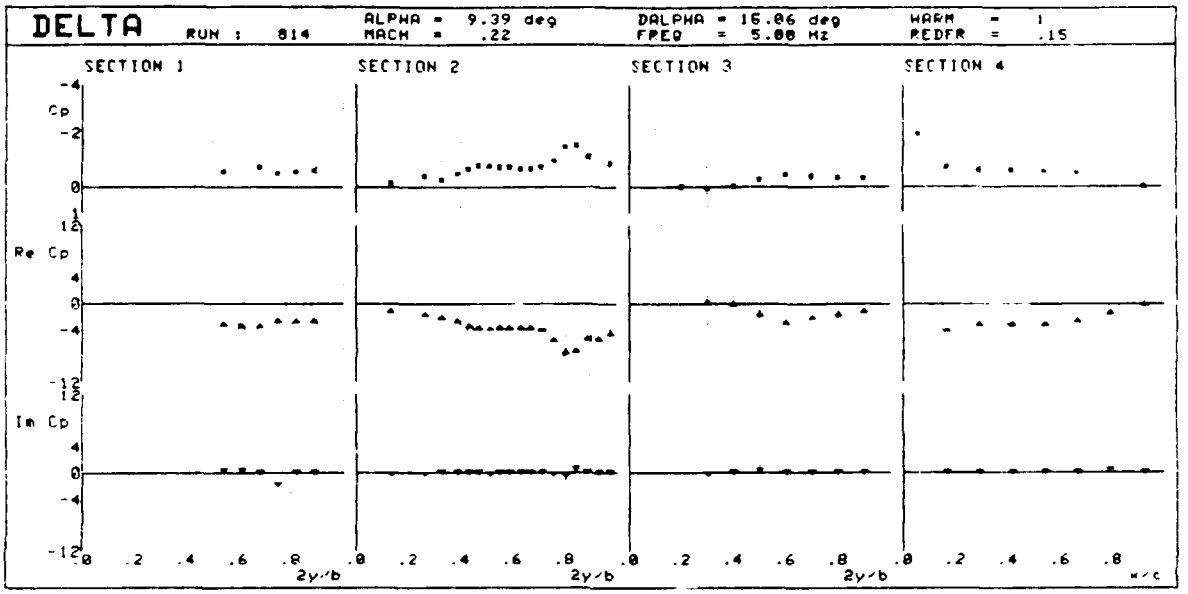

DELTA
RUN : 889
ALPHA = 10.01 deg
MACH = .22
DALPHA = 3.73 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

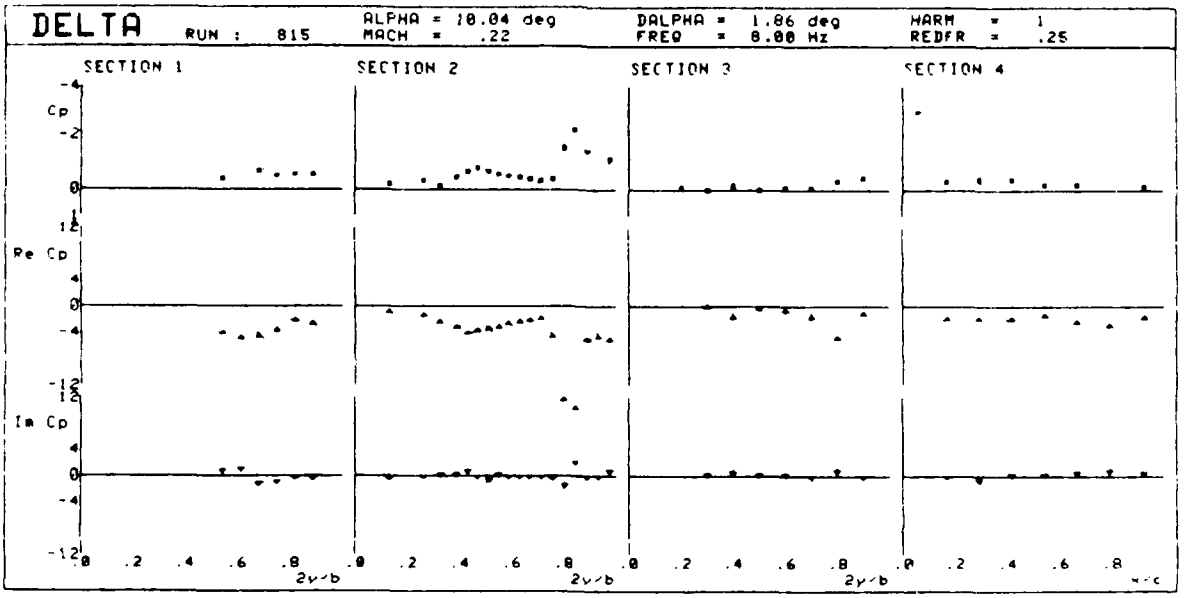

DELTA
RUN : 810
ALPHA = 9.98 deg
MACH = .22
DALPHA = 7.48 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

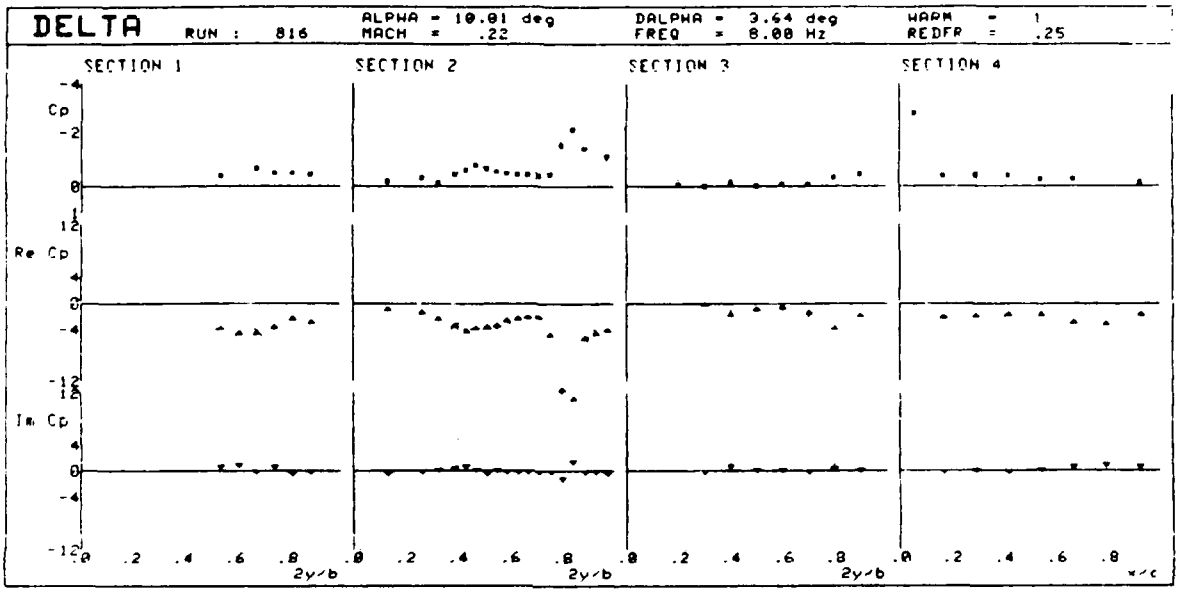

DELTA
RUN : 811
ALPHA = 9.79 deg
MACH = .22
DALPHA = 15.26 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

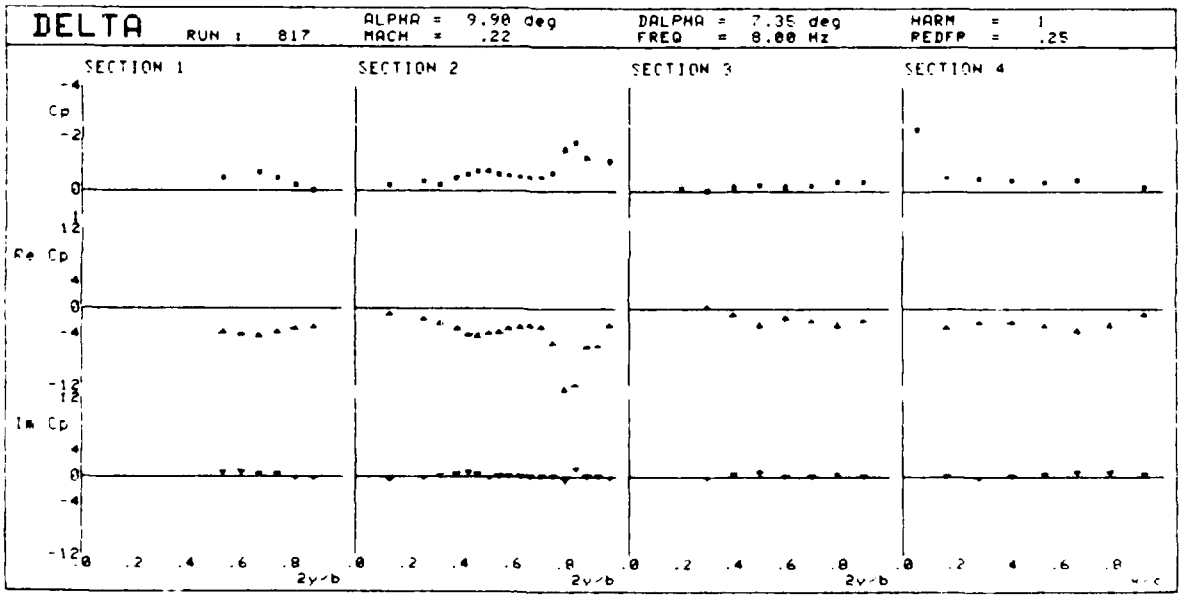

DELTA
RUN : 812
ALPHA = 10.02 deg
MACH = .22
DALPHA = 3.70 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

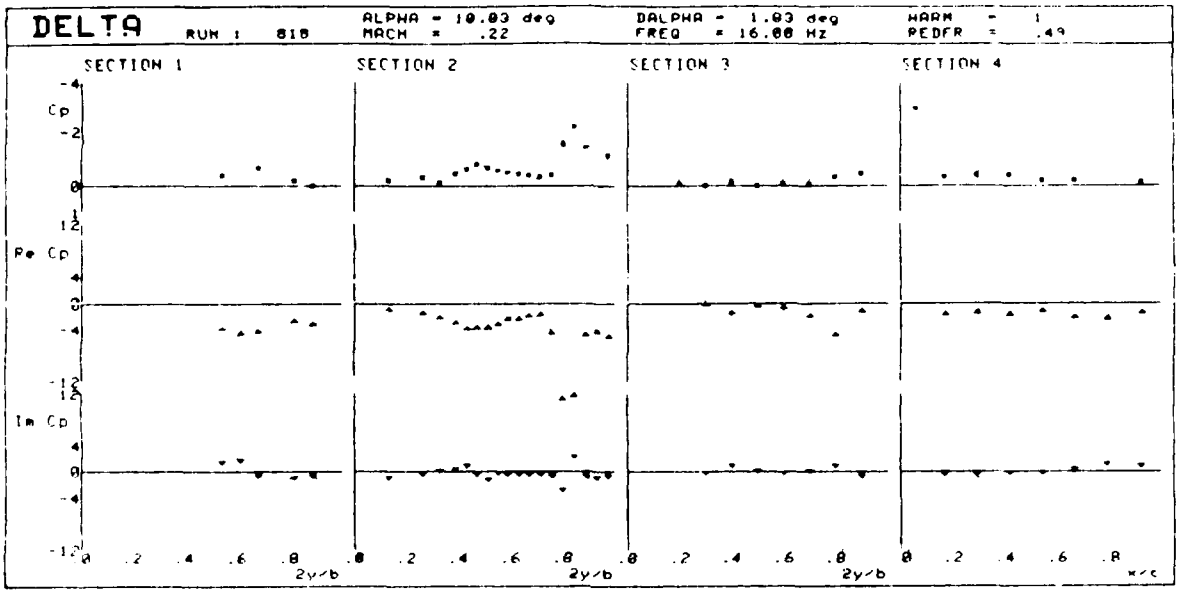

DELTA
RUN : 813
ALPHA = 9.86 deg
MACH = .22
DALPHA = 7.37 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

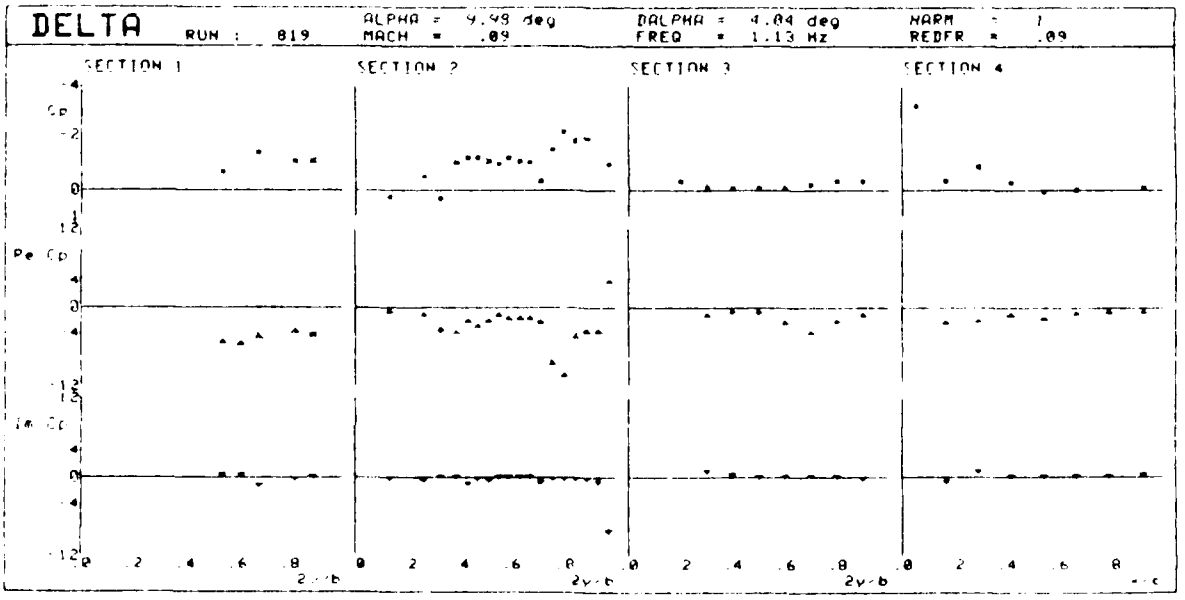

DELTA
RUN : 814
ALPHA = 9.39 deg
MACH = .22
DALPHA = 16.06 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

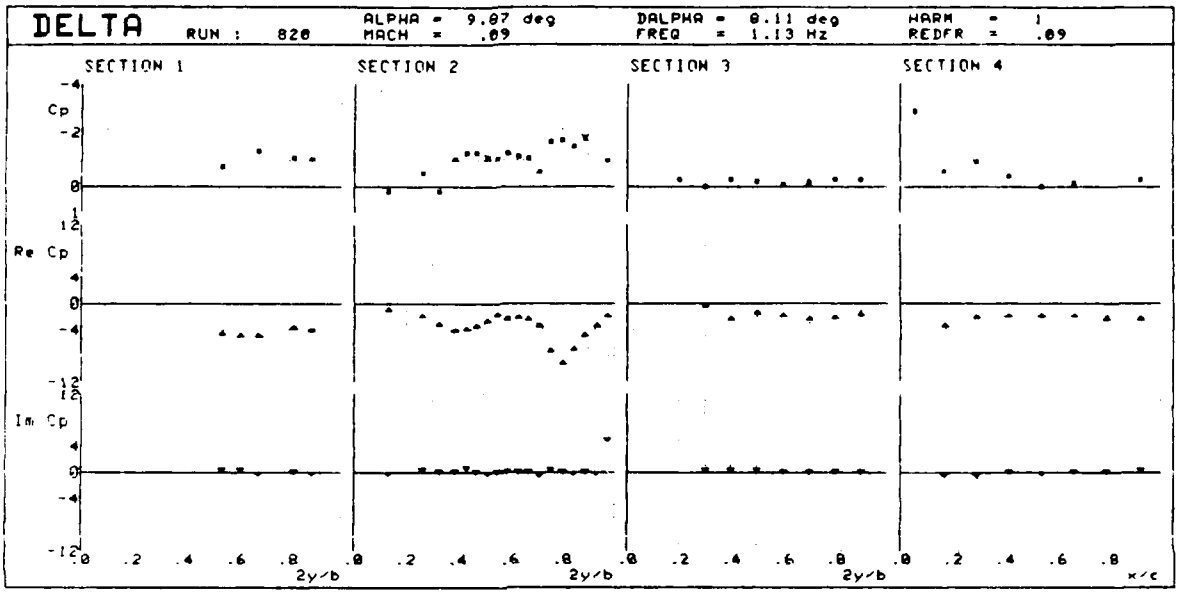

DELTA
RUN : 815
ALPHA = 10.04 deg
MACH = .22
DALPHA = 1.86 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

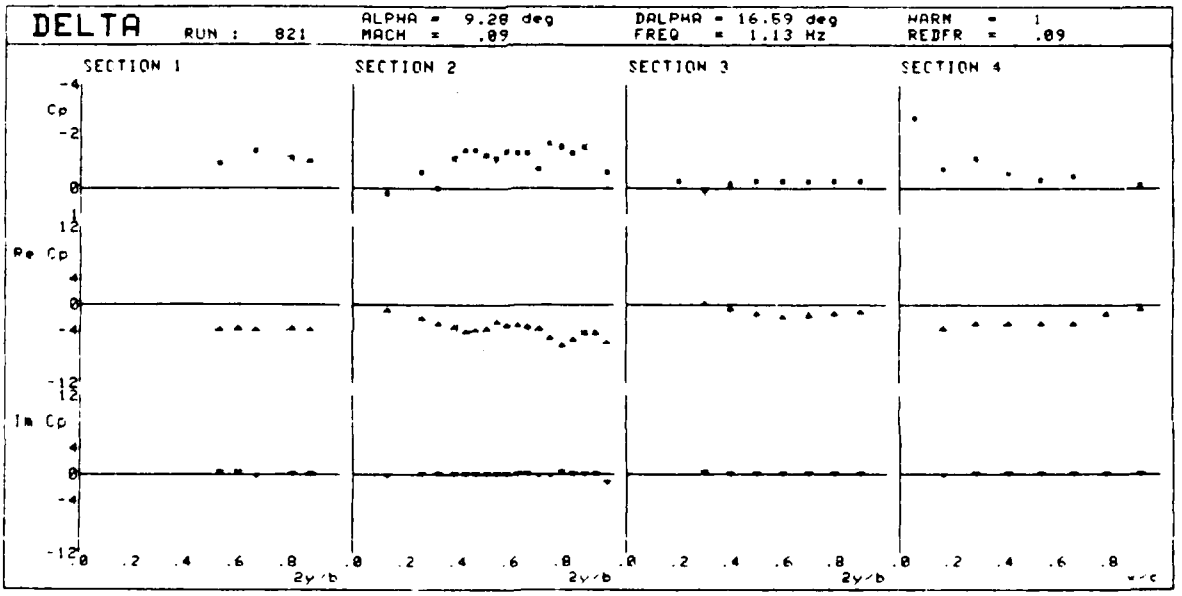

DELTA
RUN : 816
ALPHA = 10.01 deg
MACH = .22
DALPHA = 3.64 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

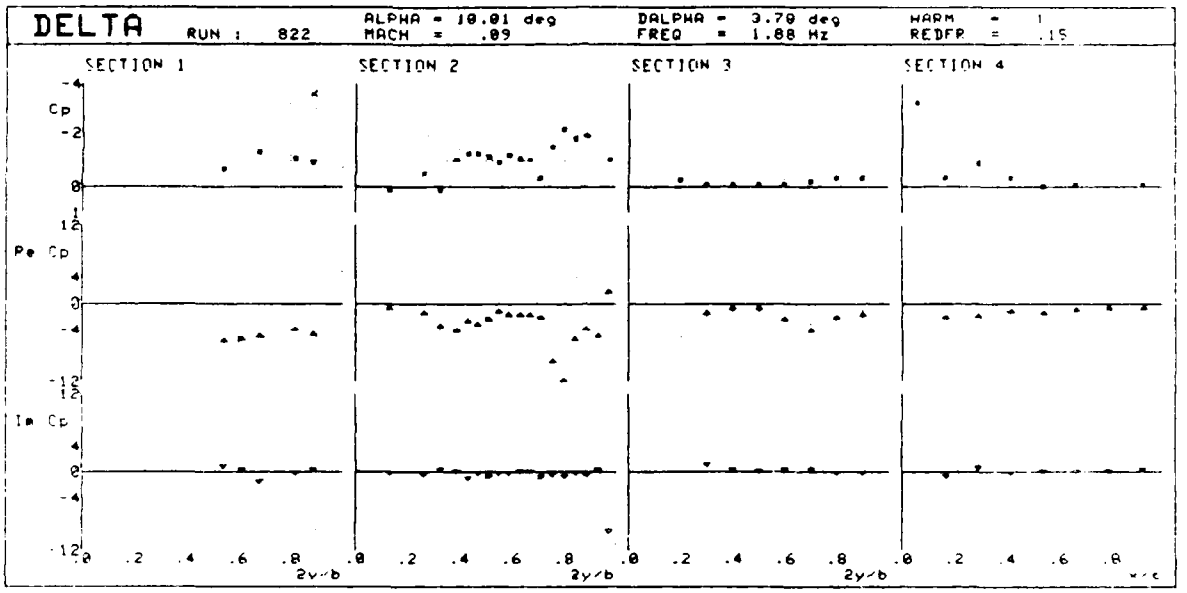

DELTA
RUN : 817
ALPHA = 9.98 deg
MACH = .22
DALPHA = 7.35 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

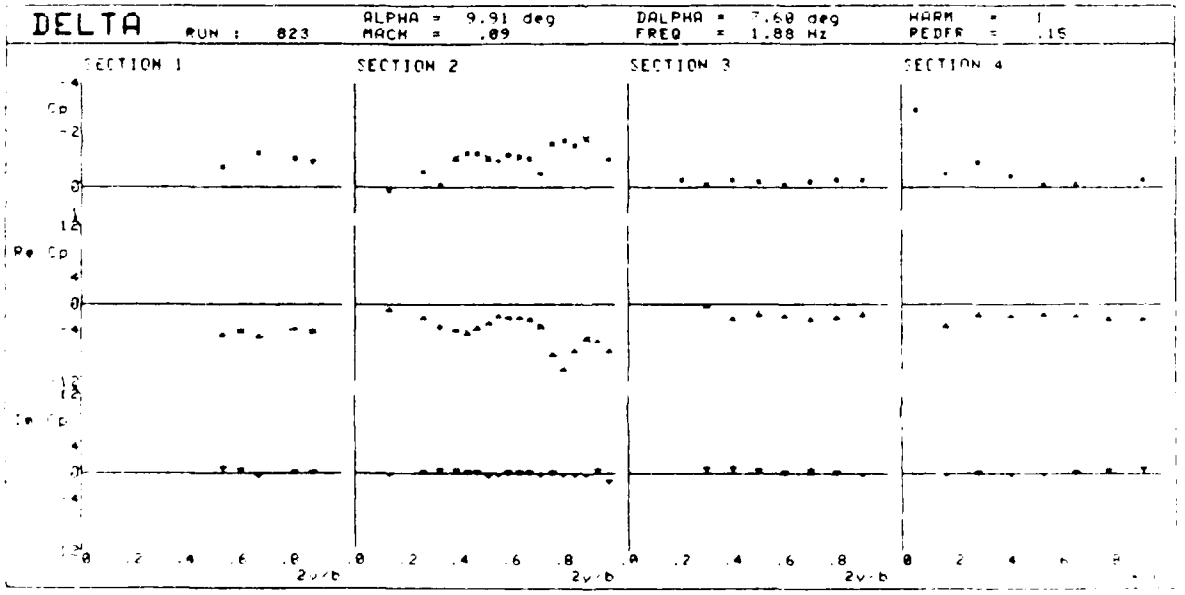

DELTA
RUN : 818
ALPHA = 10.03 deg
MACH = .22
DALPHA = 1.03 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

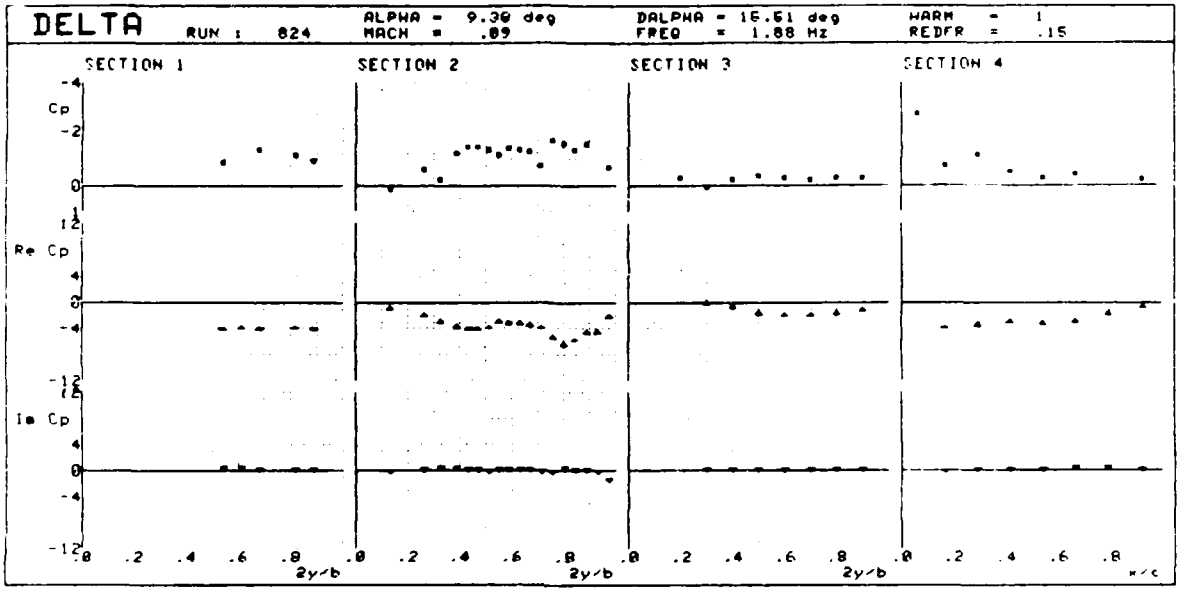

DELTA
RUN : 819
ALPHA = 9.98 deg
MACH = .09
DALPHA = 4.04 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

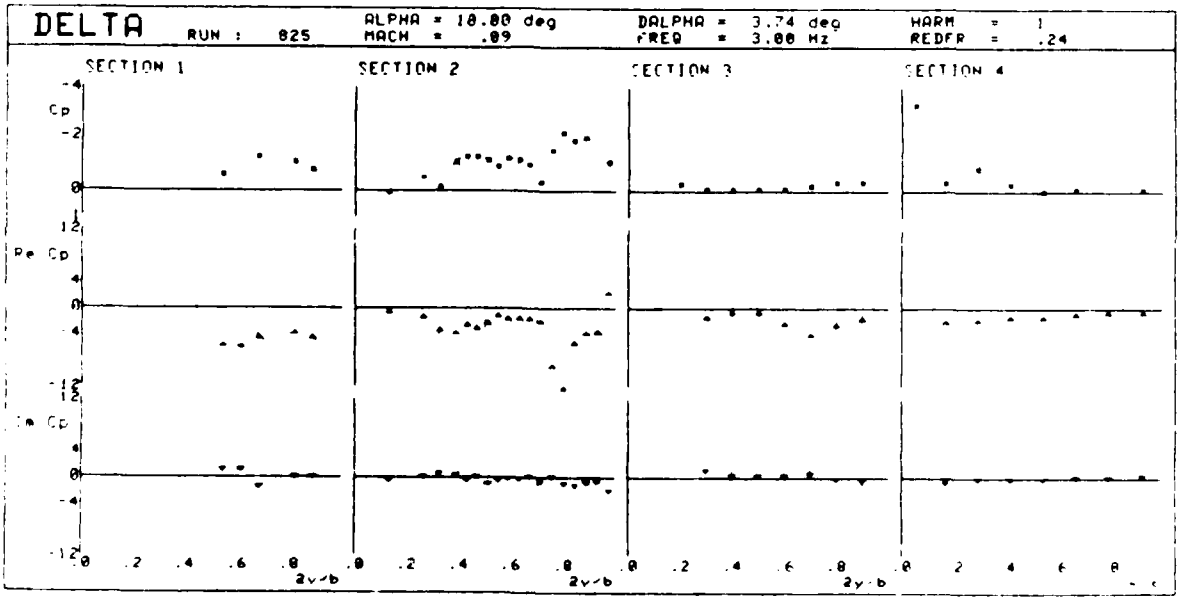

DELTA
RUN : 820
ALPHA = 9.07 deg
MACH = .09
DALPHA = 0.11 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

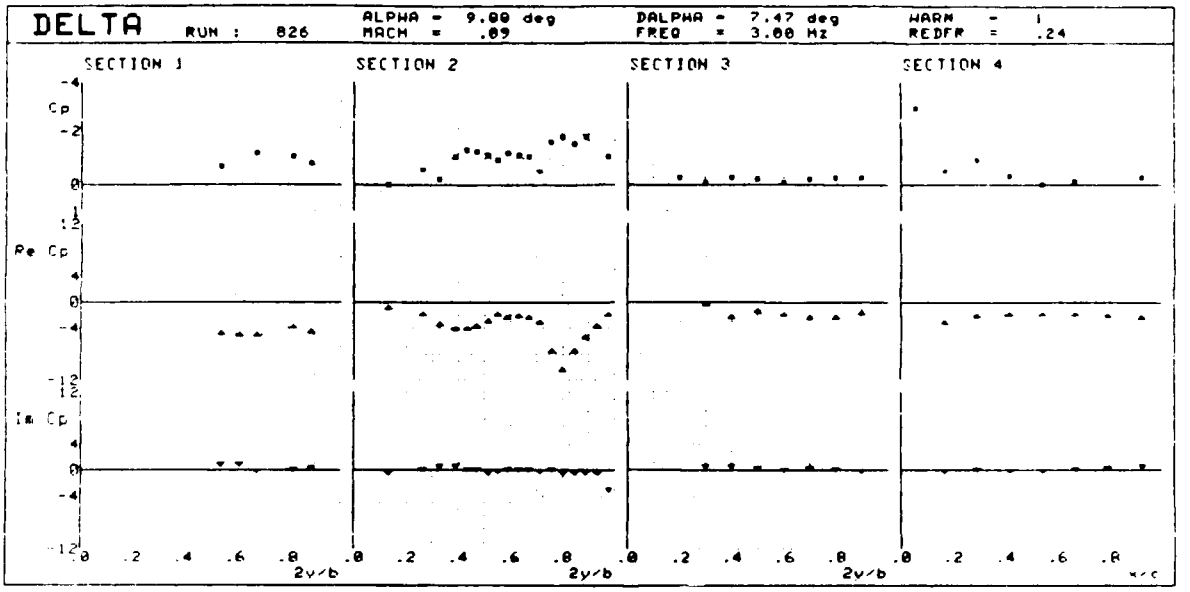

DELTA
RUN : 821
ALPHA = 9.28 deg
MACH = .09
DALPHA = 16.69 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

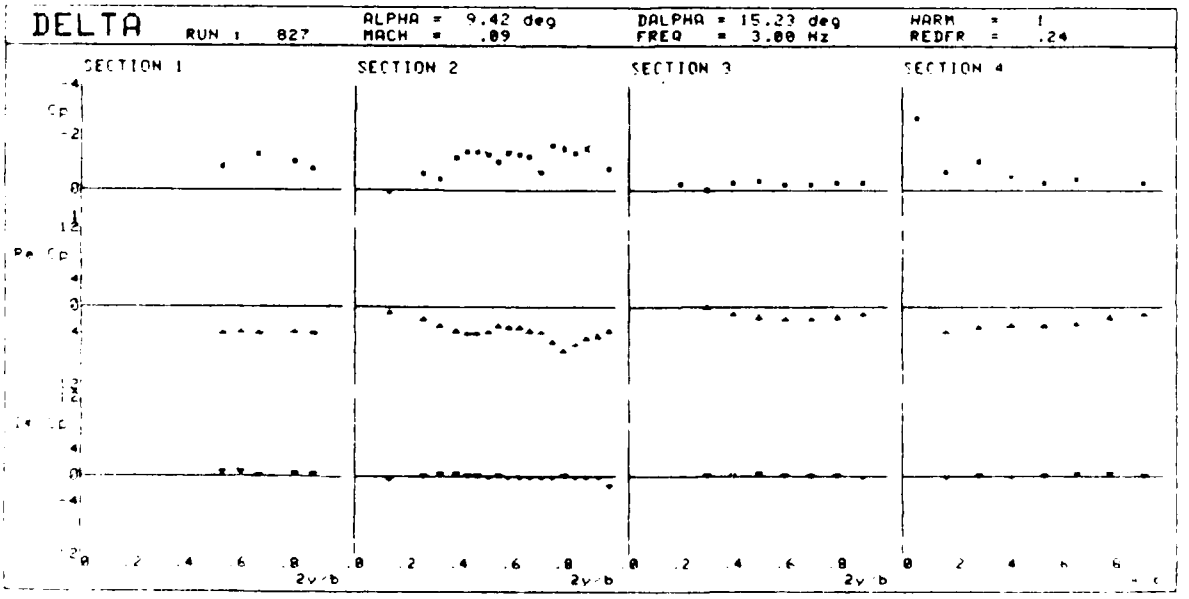

DELTA
RUN : 822
ALPHA = 10.01 deg
MACH = .09
DALPHA = 3.70 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

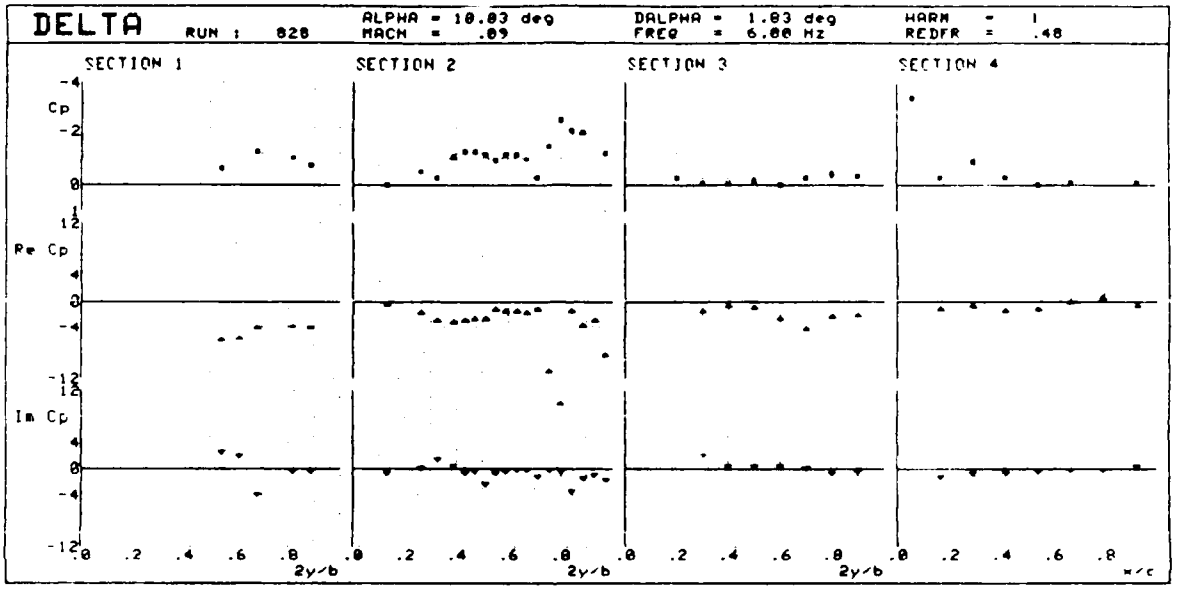

DELTA
RUN : 823
ALPHA = 9.91 deg
MACH = .09
DALPHA = 7.60 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

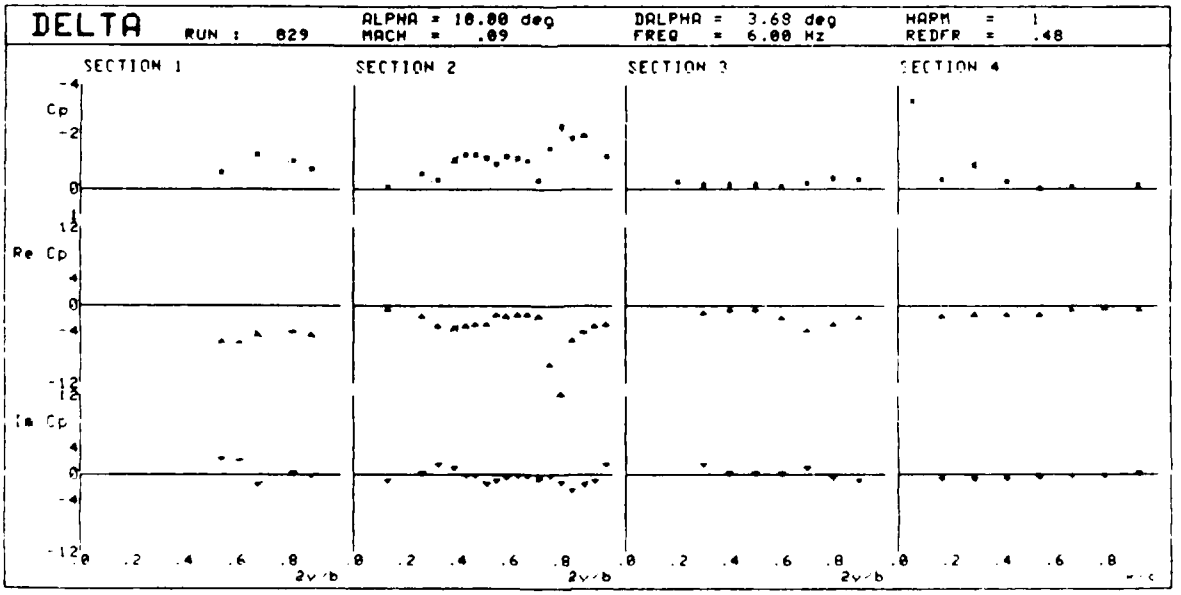

DELTA
RUN : 824
ALPHA = 9.30 deg
MACH = .09
DALPHA = 15.61 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

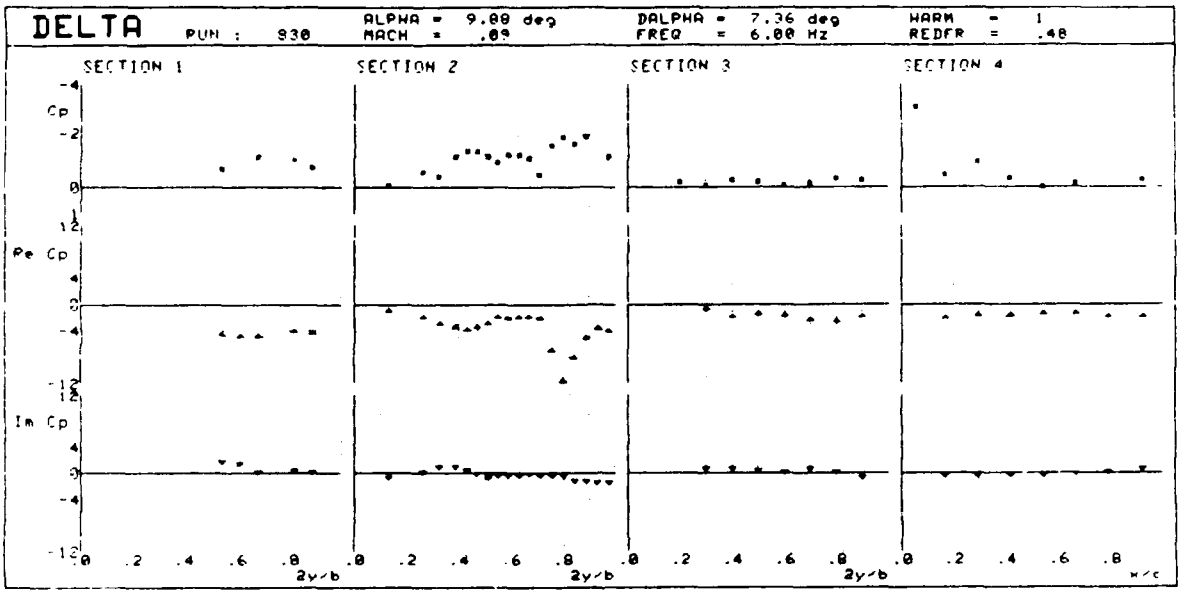

DELTA
RUN : 825
ALPHA = 10.00 deg
MACH = .09
DALPHA = 3.74 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

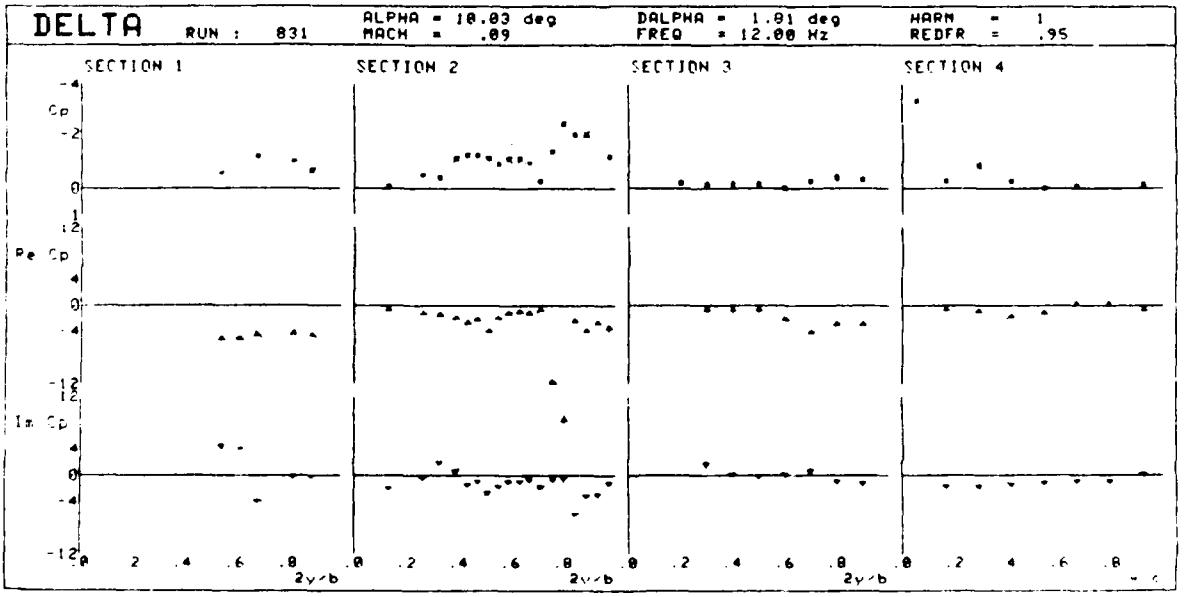

DELTA
RUN : 826
ALPHA = 9.00 deg
MACH = .09
DALPHA = 7.47 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

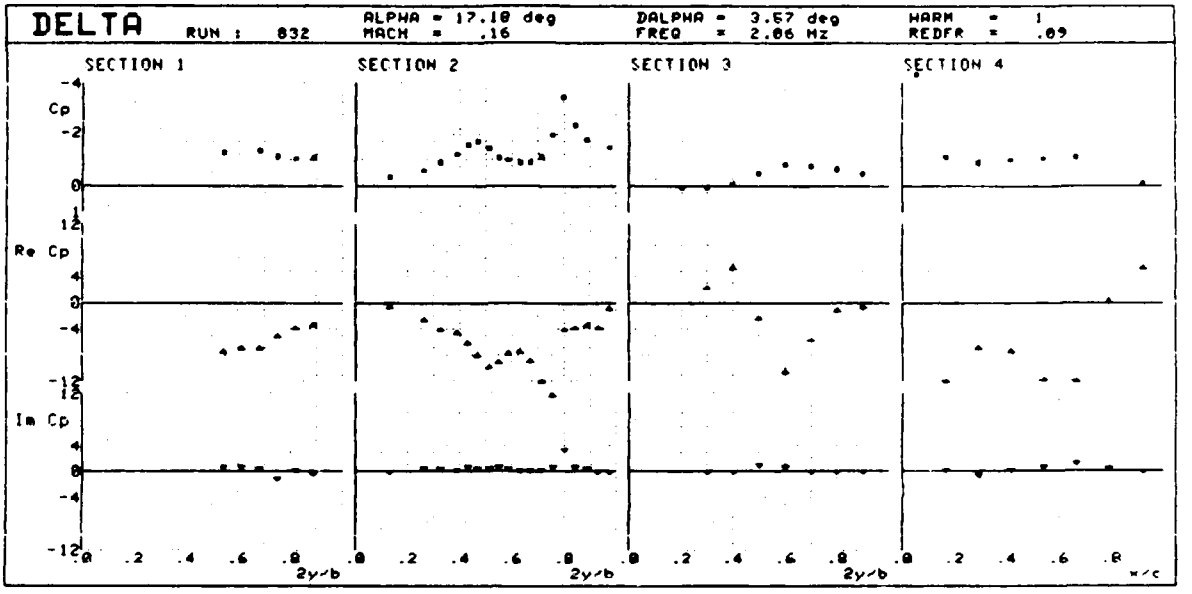

DELTA
RUN : 827
ALPHA = 9.42 deg
MACH = .09
DALPHA = 15.23 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
2y/b

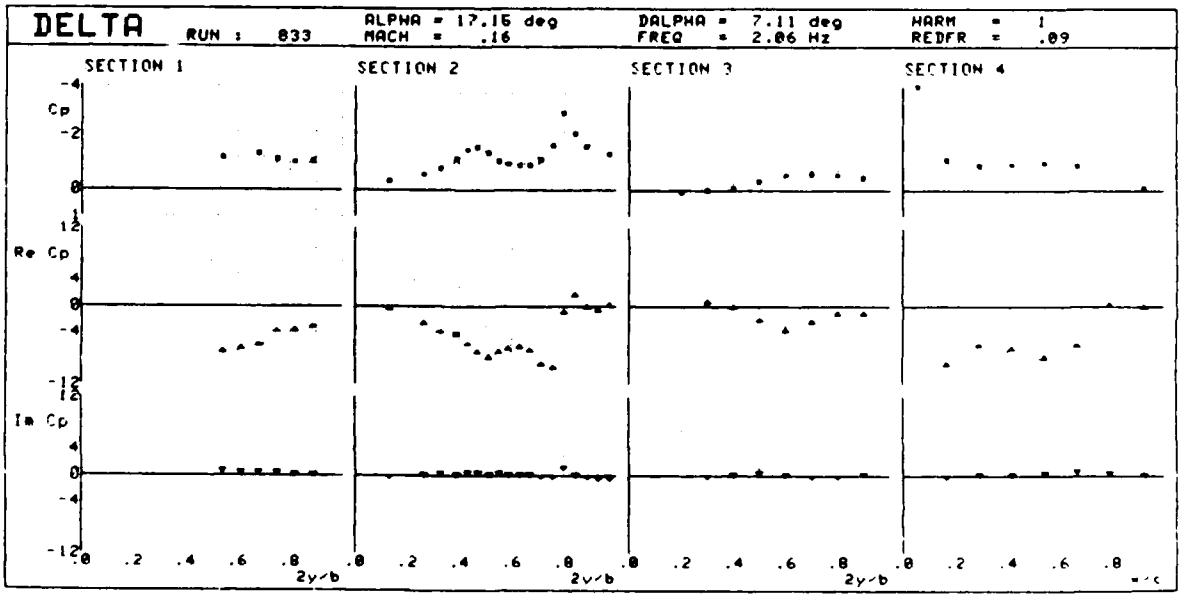

DELTA
RUN : 828
ALPHA = 10.03 deg
MACH = .09
DALPHA = 1.03 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

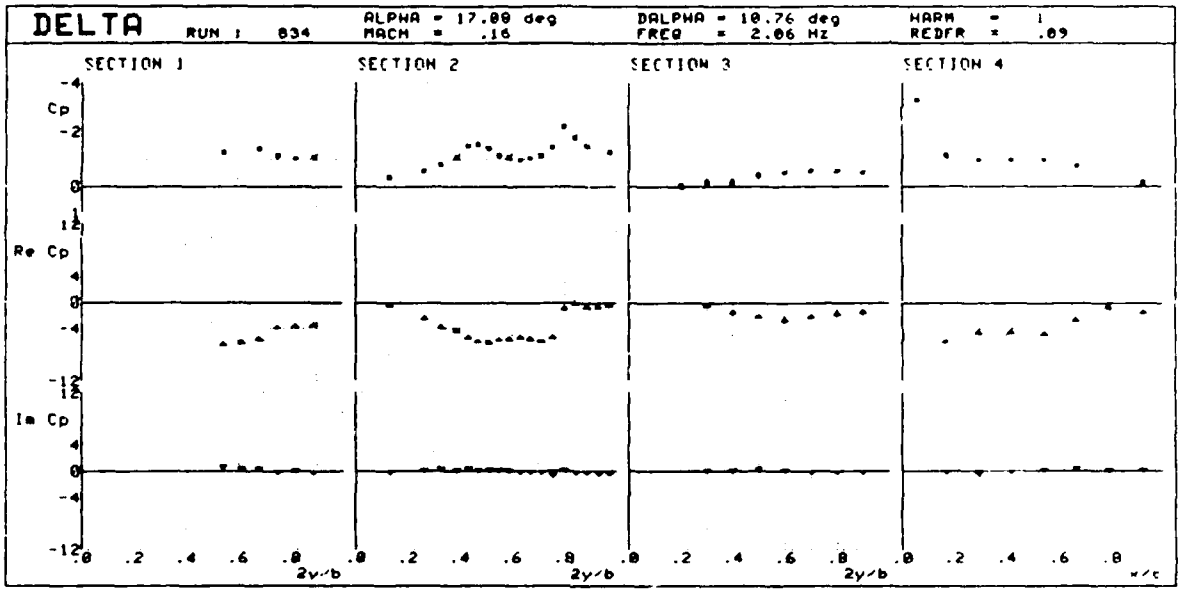

DELTA
RUN : 829
ALPHA = 10.00 deg
MACH = .09
DALPHA = 3.68 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

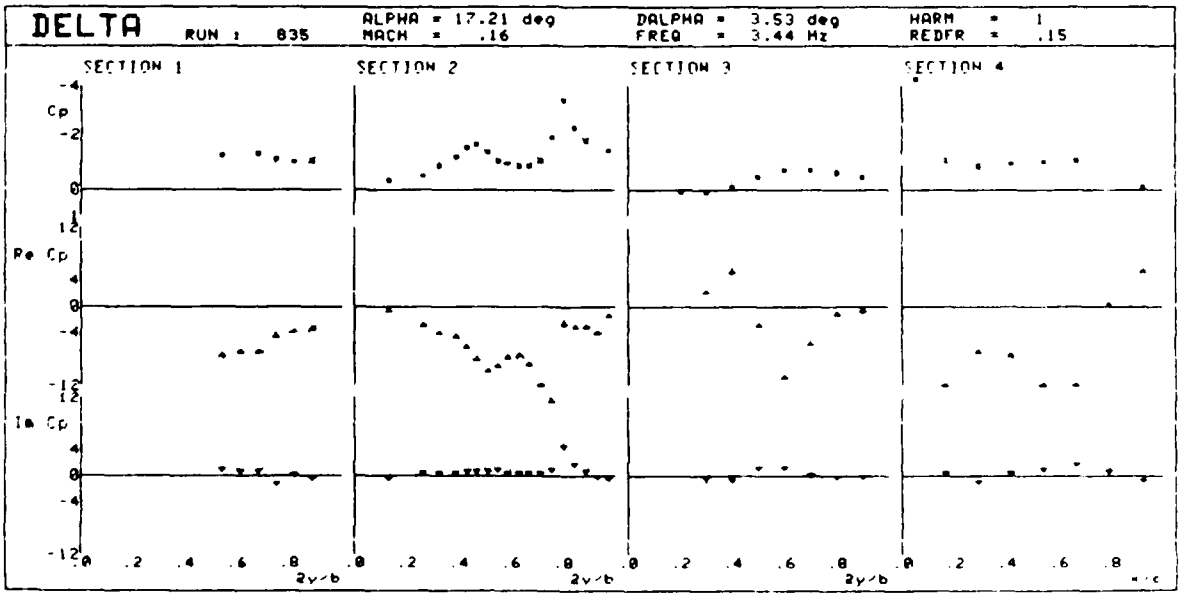

DELTA
RUN : 830
ALPHA = 9.00 deg
MACH = .09
DALPHA = 7.36 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

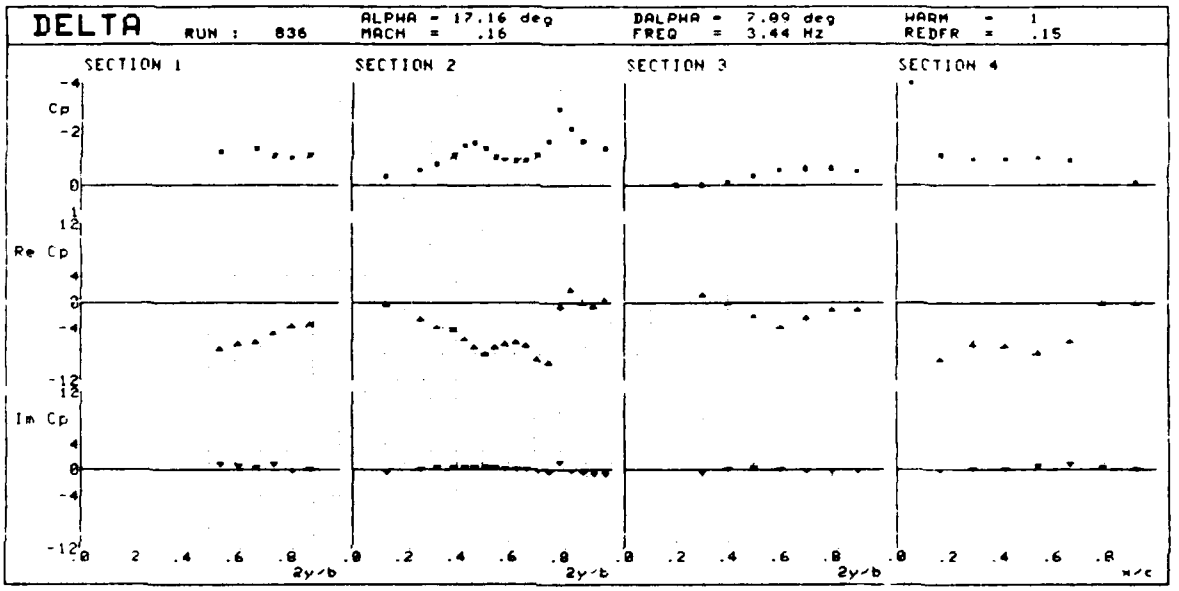

DELTA
RUN : 831
ALPHA = 10.03 deg
MACH = .09
DALPHA = 1.81 deg
FREQ = 12.00 Hz
HARM = 1
REDFR = .95
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

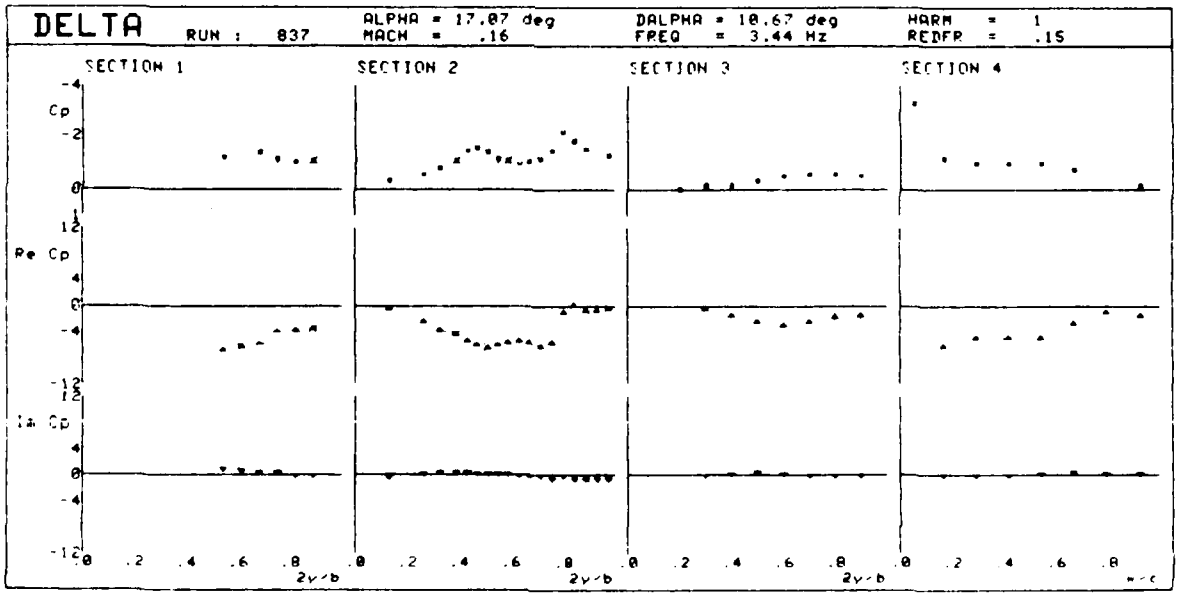

DELTA
RUN : 832
ALPHA = 17.10 deg
MACH = .16
DALPHA = 3.67 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

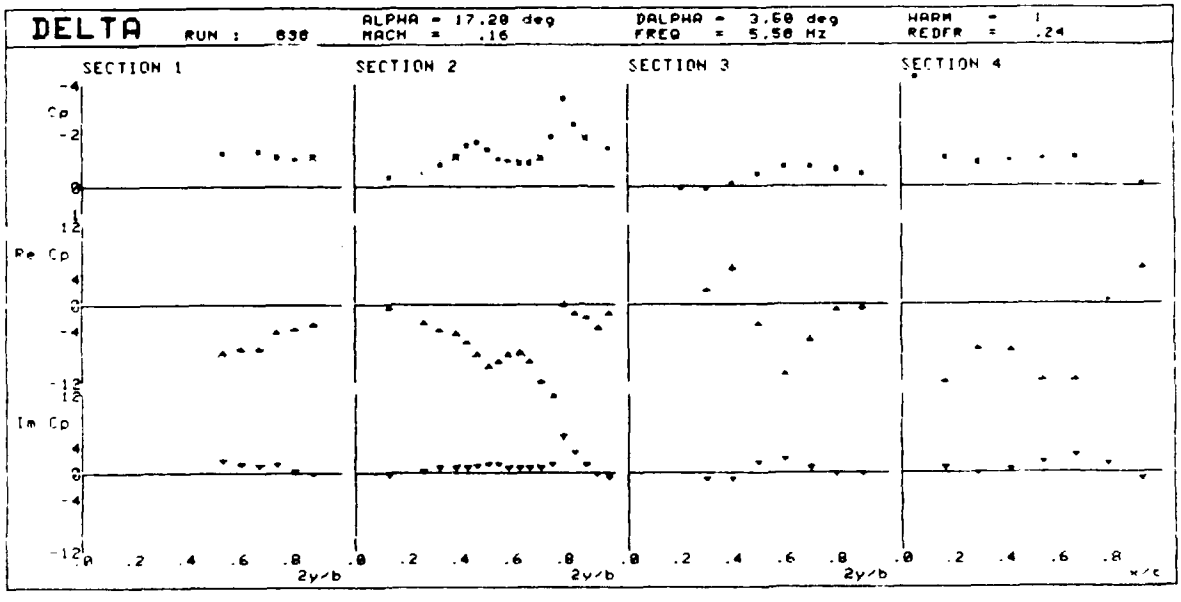

DELTA
RUN : 833
ALPHA = 17.15 deg
MACH = .16
DALPHA = 7.11 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

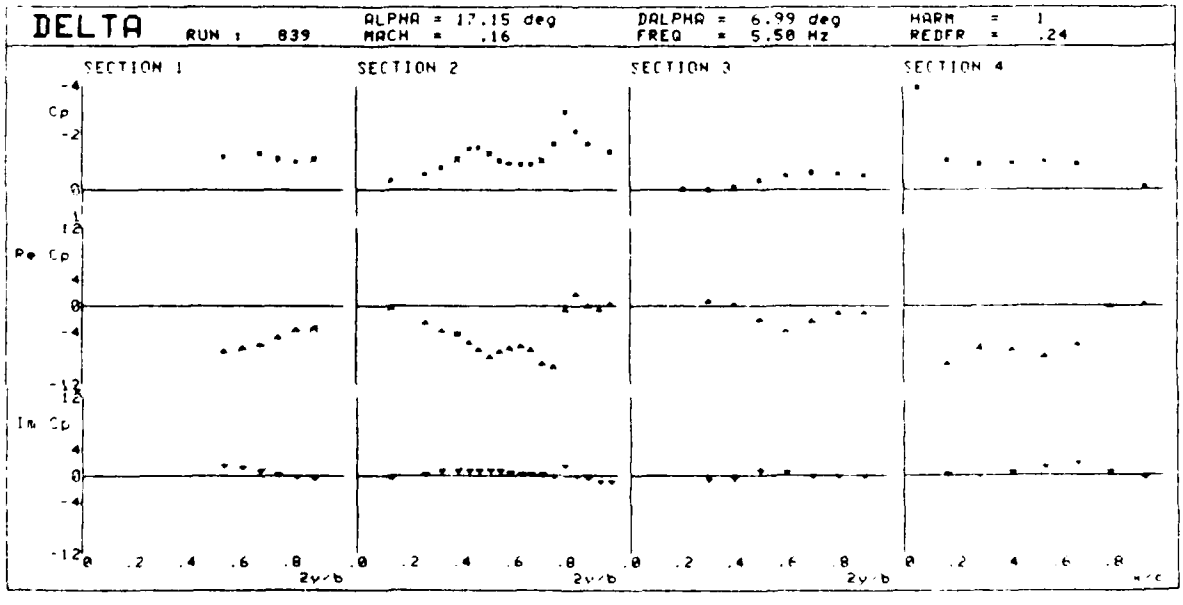

DELTA
RUN : 834
ALPHA = 17.00 deg
MACH = .16
DALPHA = 10.76 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

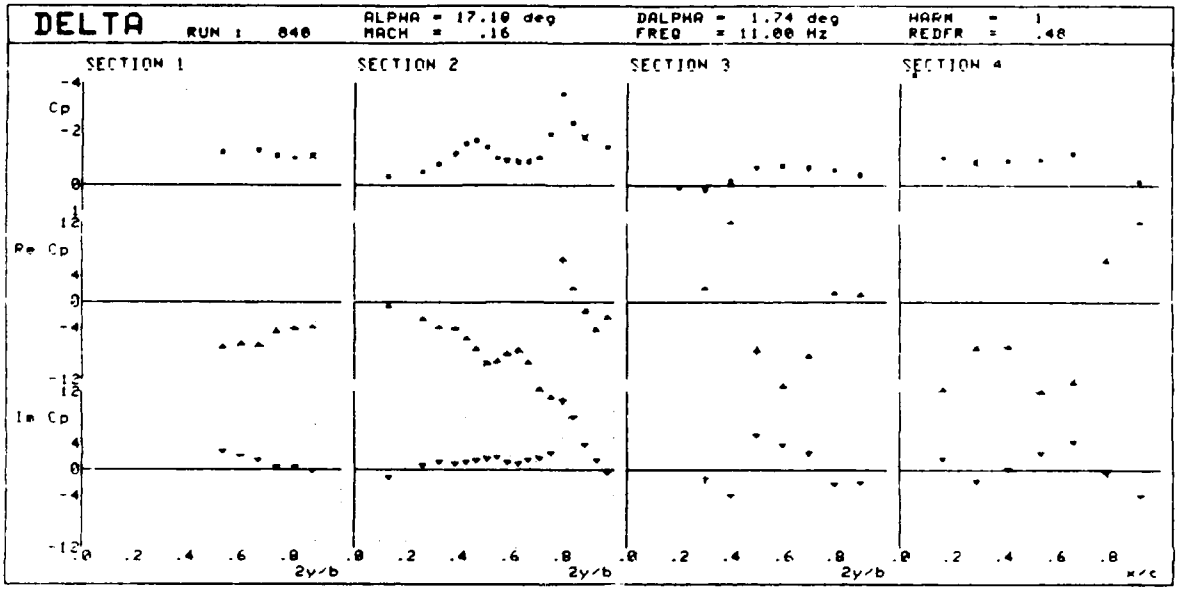

DELTA
RUN : 835
ALPHA = 17.21 deg
MACH = .16
DALPHA = 3.53 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

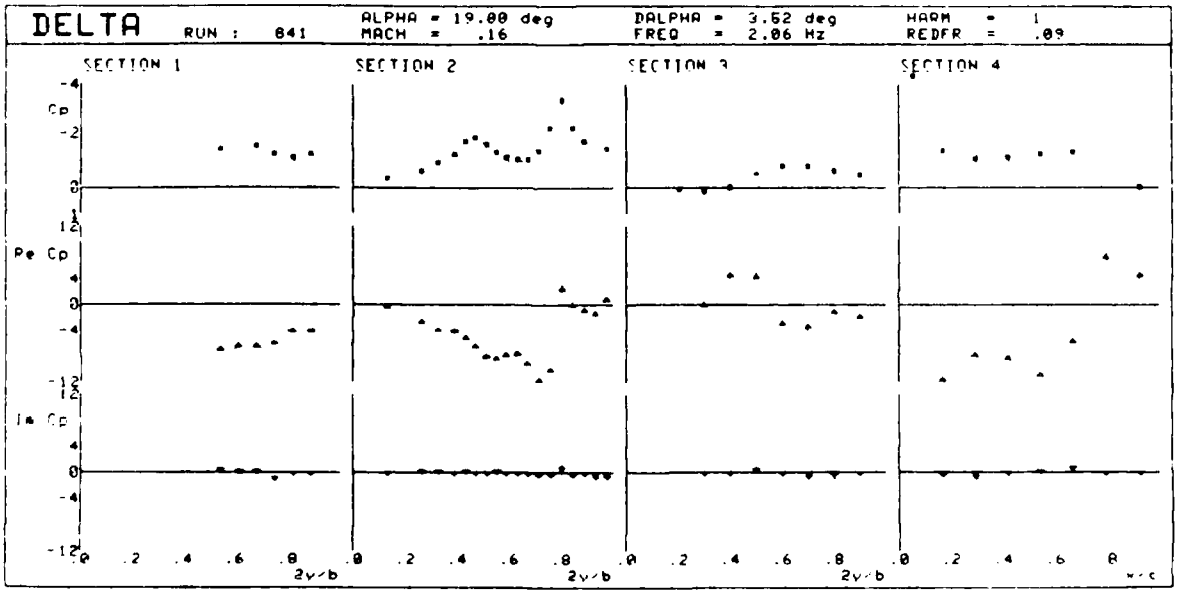

DELTA
RUN : 836
ALPHA = 17.16 deg
MACH = .16
DALPHA = 7.89 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

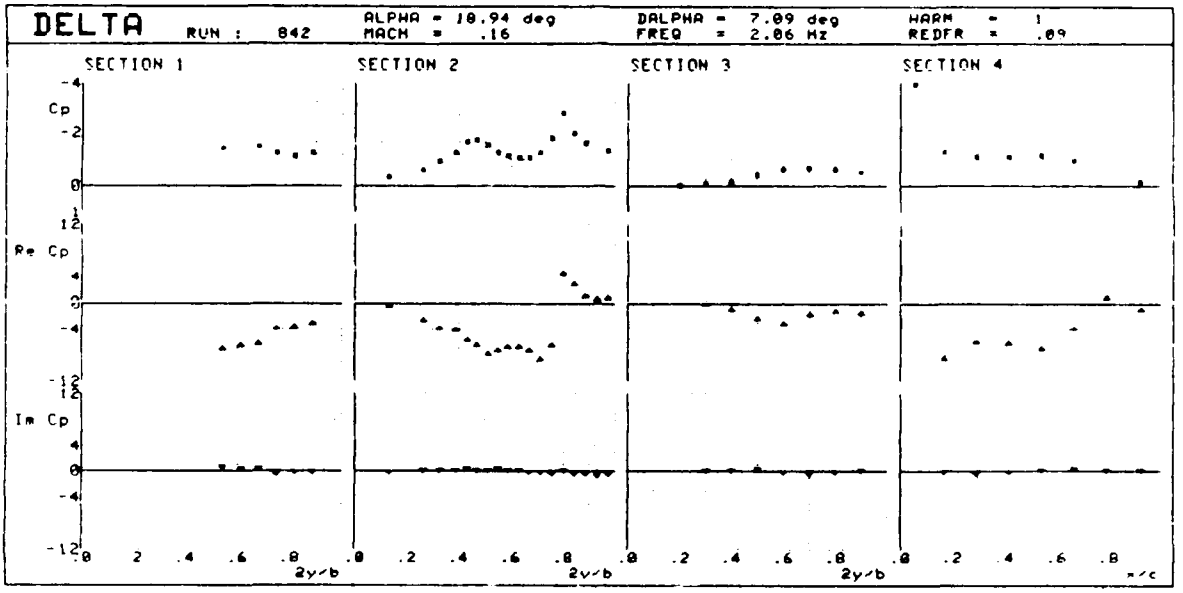

DELTA
RUN : 837
ALPHA = 17.07 deg
MACH = .16
DALPHA = 10.67 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

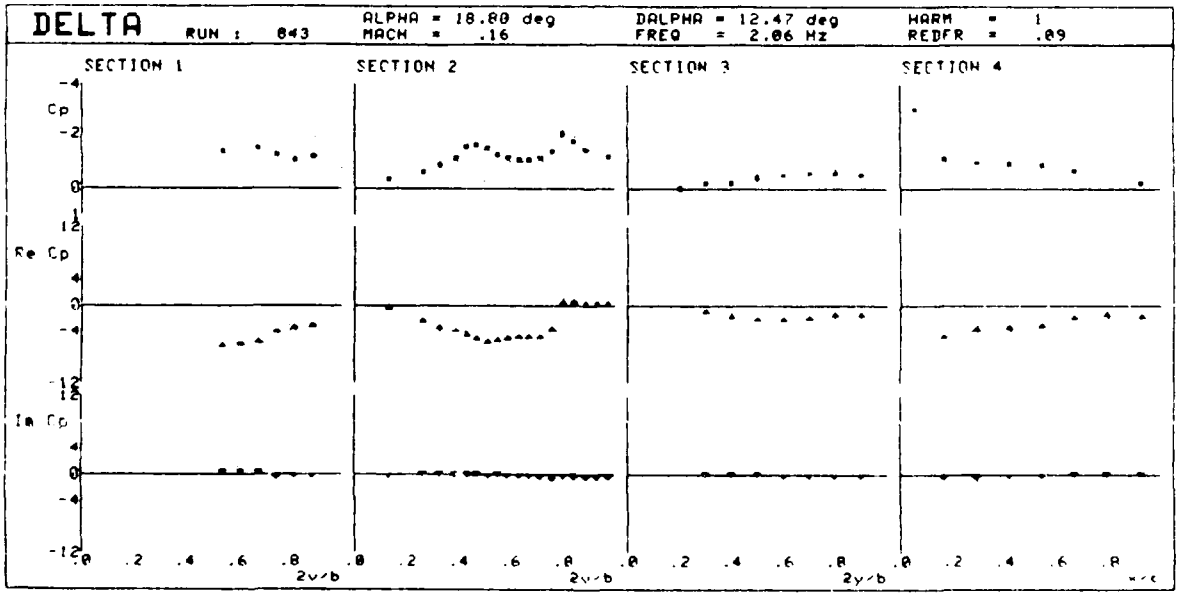

DELTA
RUN : 838
ALPHA = 17.20 deg
MACH = .16
DALPHA = 3.60 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

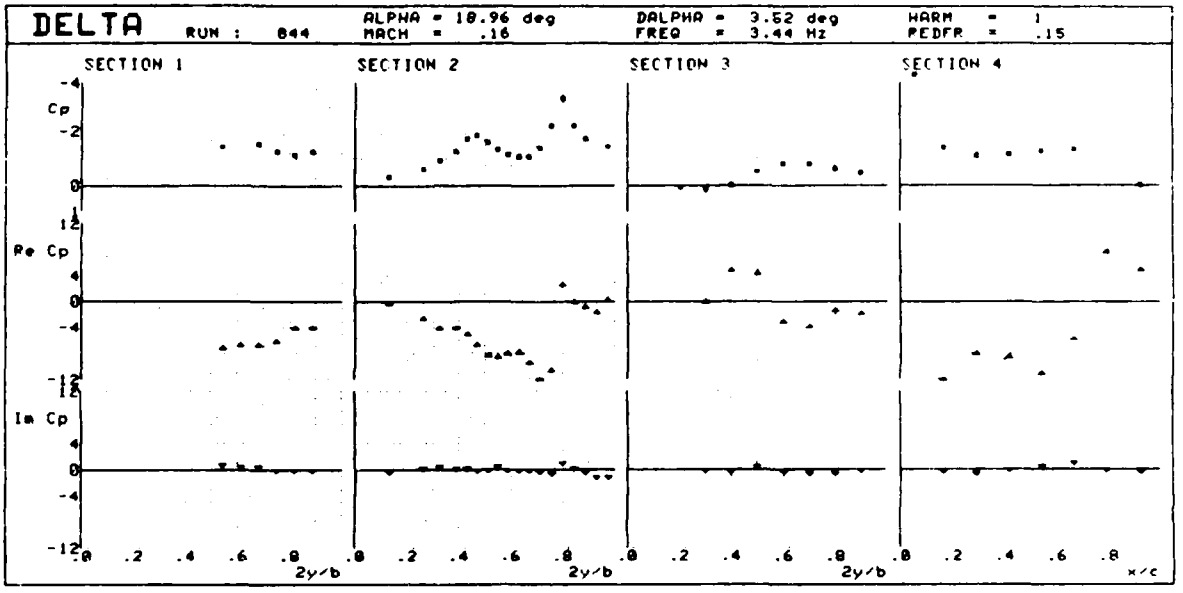

DELTA
RUN : 839
ALPHA = 17.15 deg
MACH = .16
DALPHA = 6.99 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

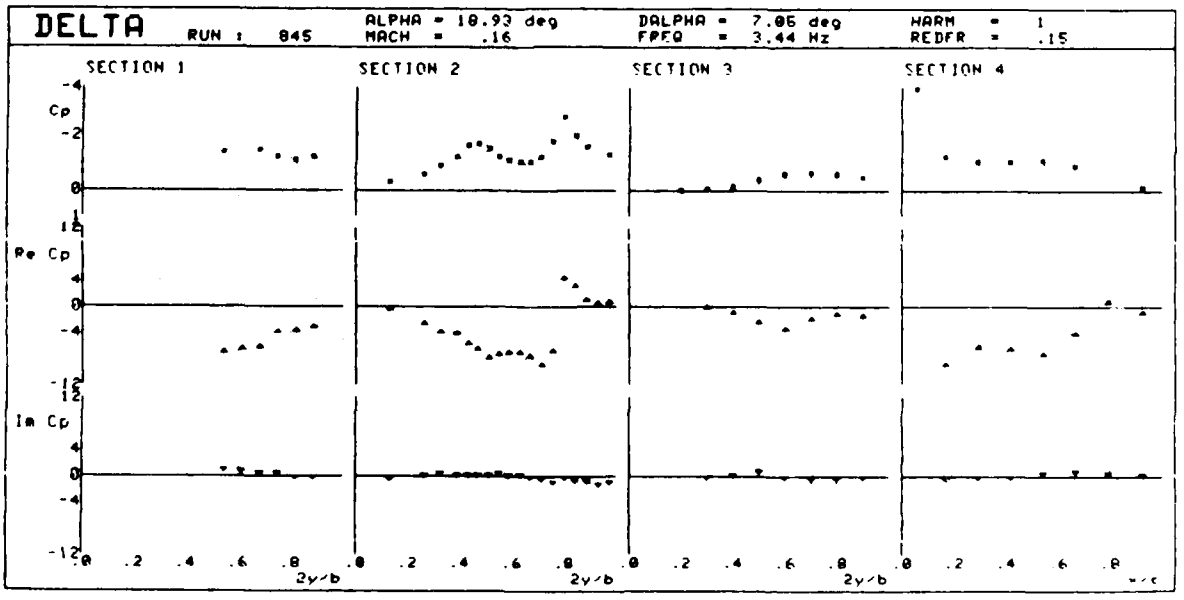

DELTA
RUN : 840
ALPHA = 17.10 deg
MACH = .16
DALPHA = 1.74 deg
FREQ = 11.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

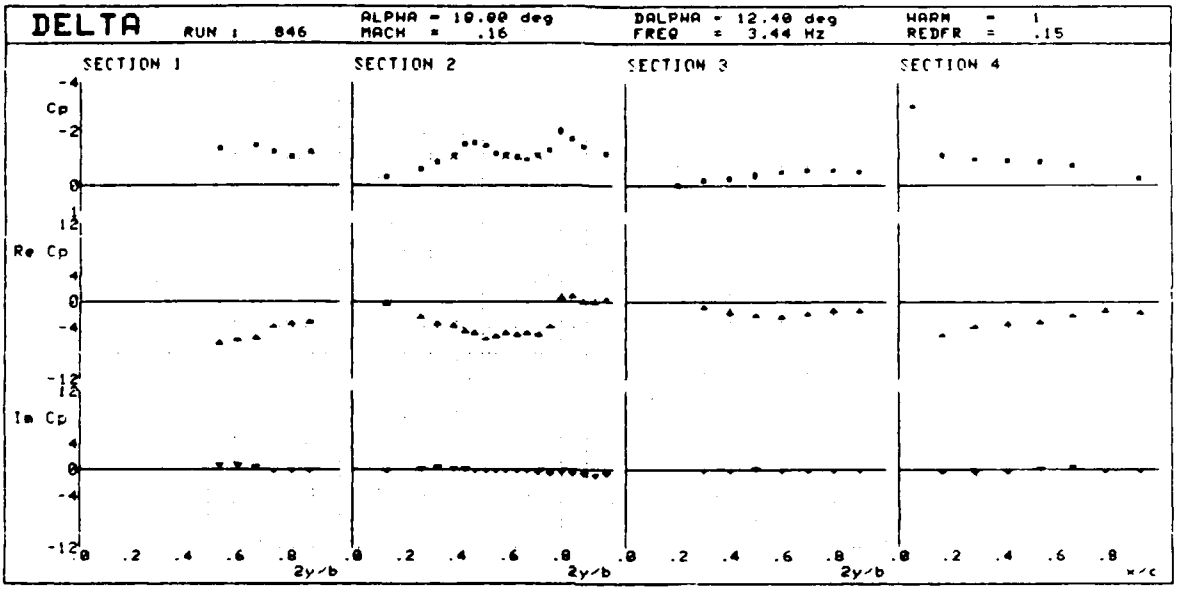

DELTA
RUN : 841
ALPHA = 19.00 deg
MACH = .16
DALPHA = 3.52 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

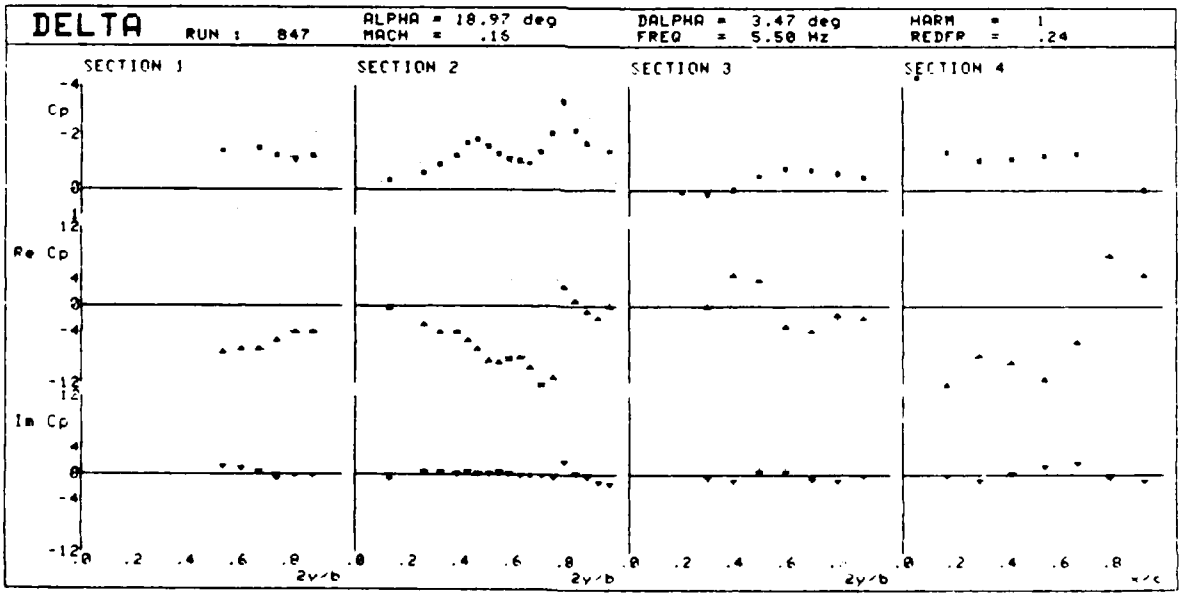

DELTA
RUN : 842
ALPHA = 10.94 deg
MACH = .16
DALPHA = 7.09 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

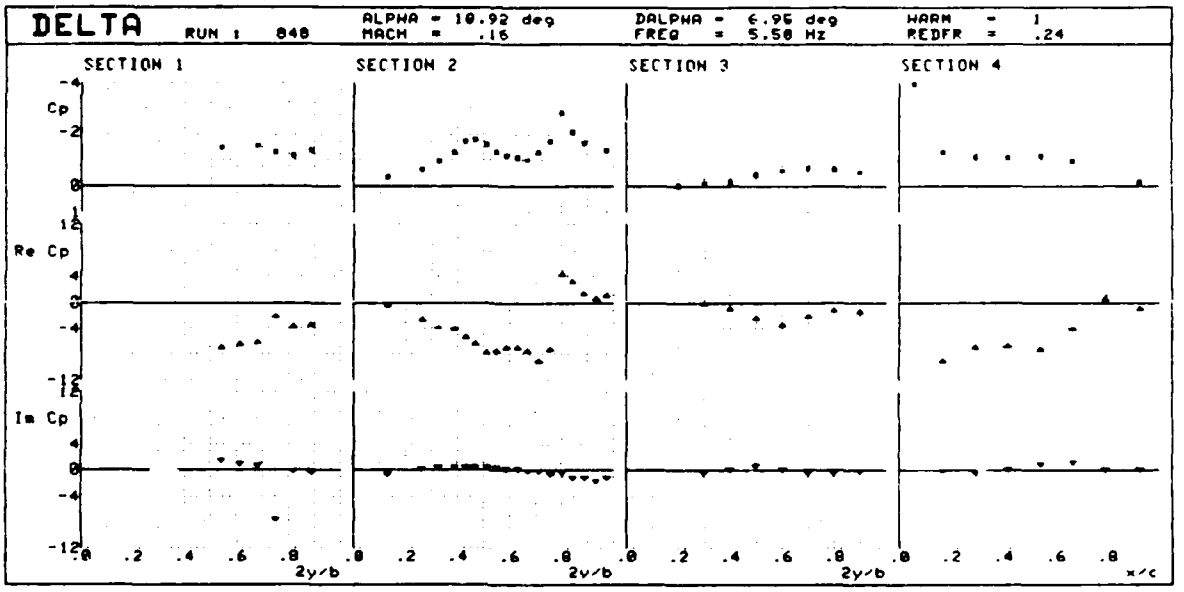

DELTA
RUN : 843
ALPHA = 18.80 deg
MACH = .16
DALPHA = 12.47 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

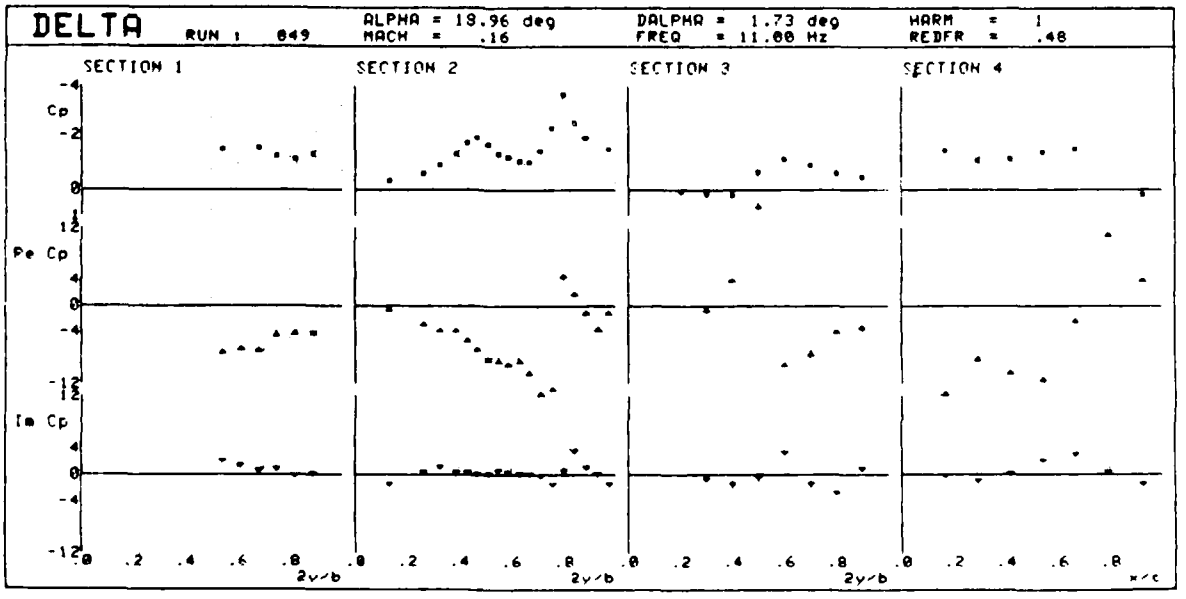

DELTA
RUN : 844
ALPHA = 10.96 deg
MACH = .16
DALPHA = 3.52 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

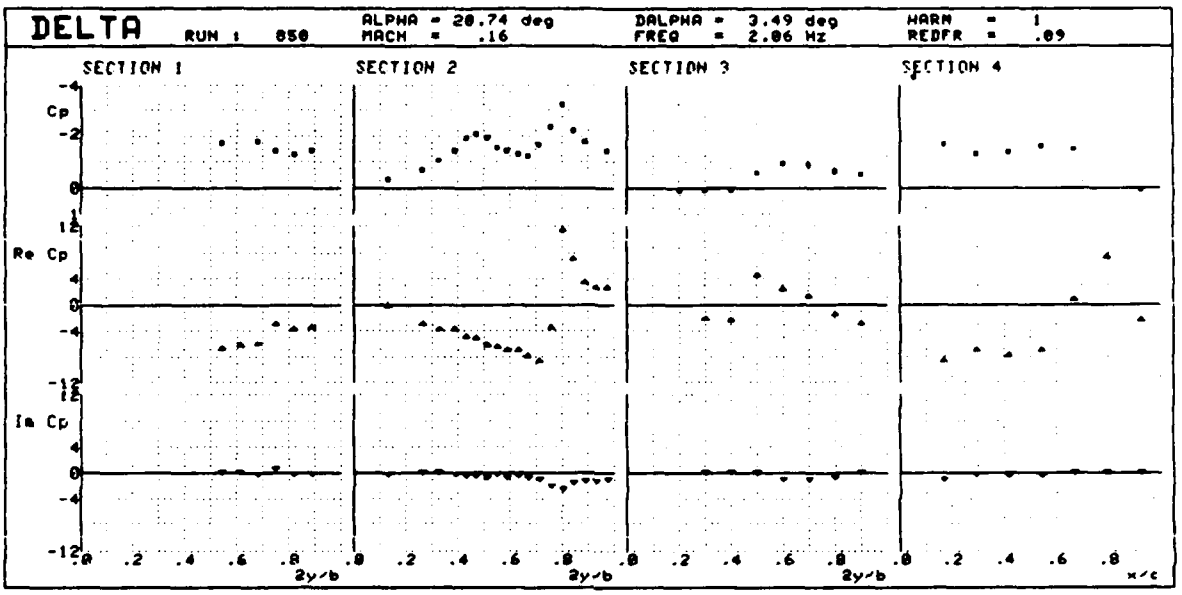

DELTA
RUN : 845
ALPHA = 10.93 deg
MACH = .16
DALPHA = 7.05 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

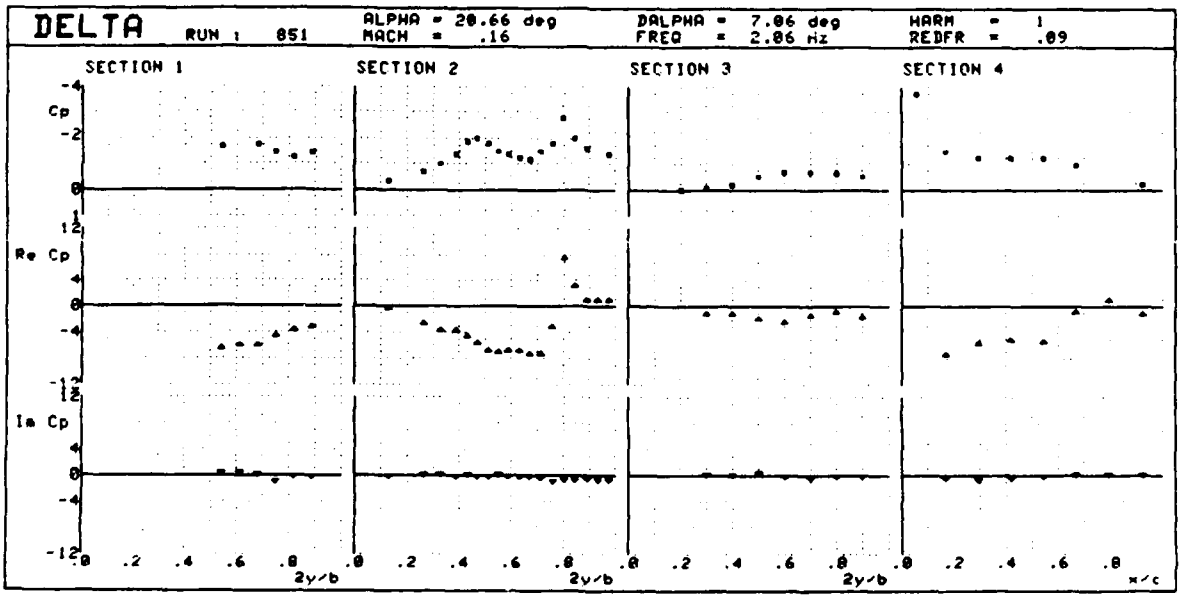

DELTA
RUN : 846
ALPHA = 10.00 deg
MACH = .16
DALPHA = 12.40 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

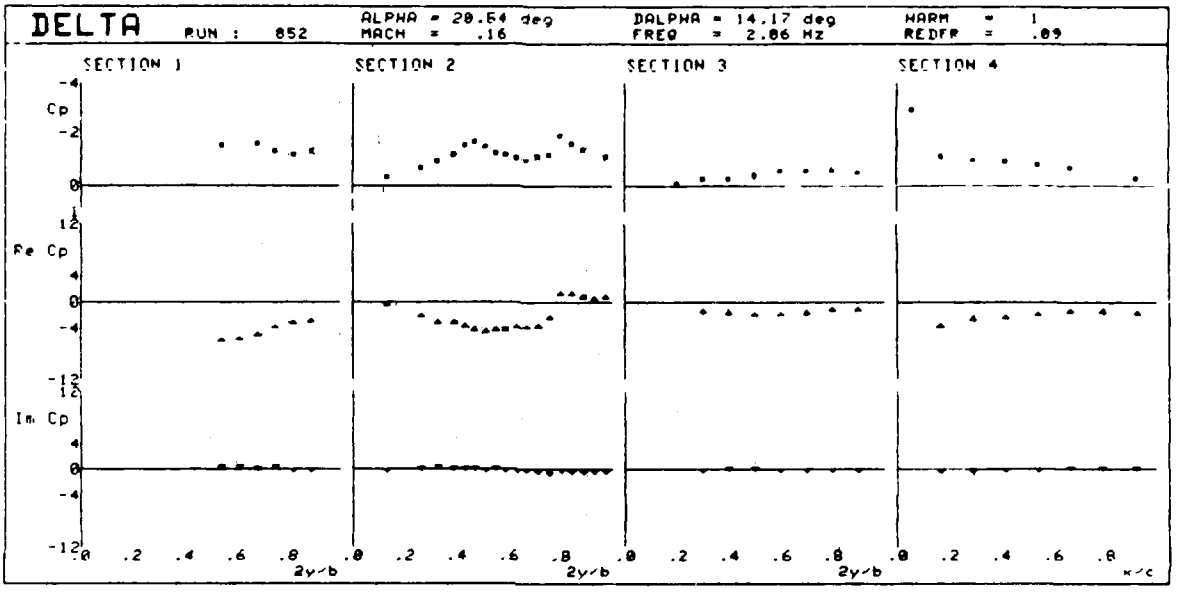

DELTA
RUN : 847
ALPHA = 18.97 deg
MACH = .16
DALPHA = 3.47 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

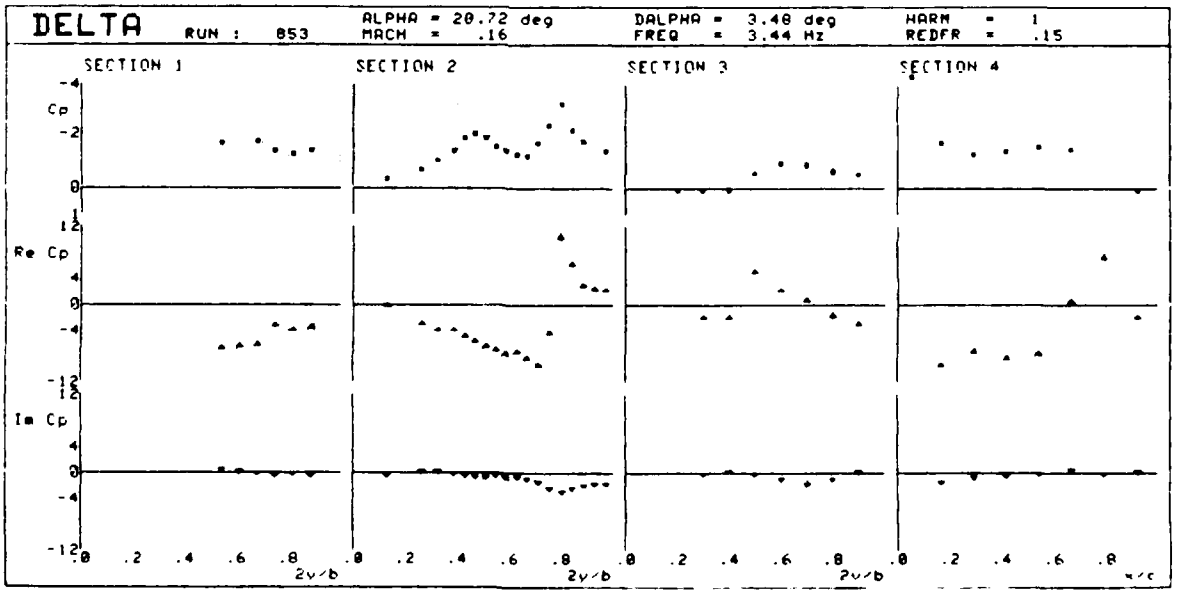

DELTA
RUN : 848
ALPHA = 10.92 deg
MACH = .16
DALPHA = 6.95 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

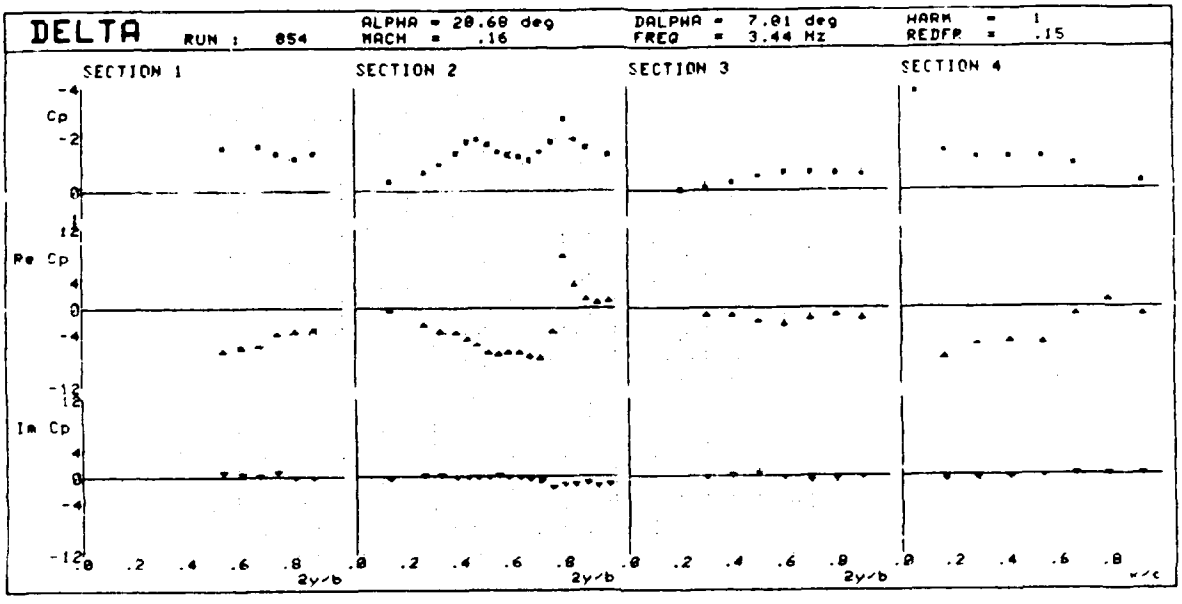

DELTA
RUN : 849
ALPHA = 18.96 deg
MACH = .16
DALPHA = 1.73 deg
FREQ = 11.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

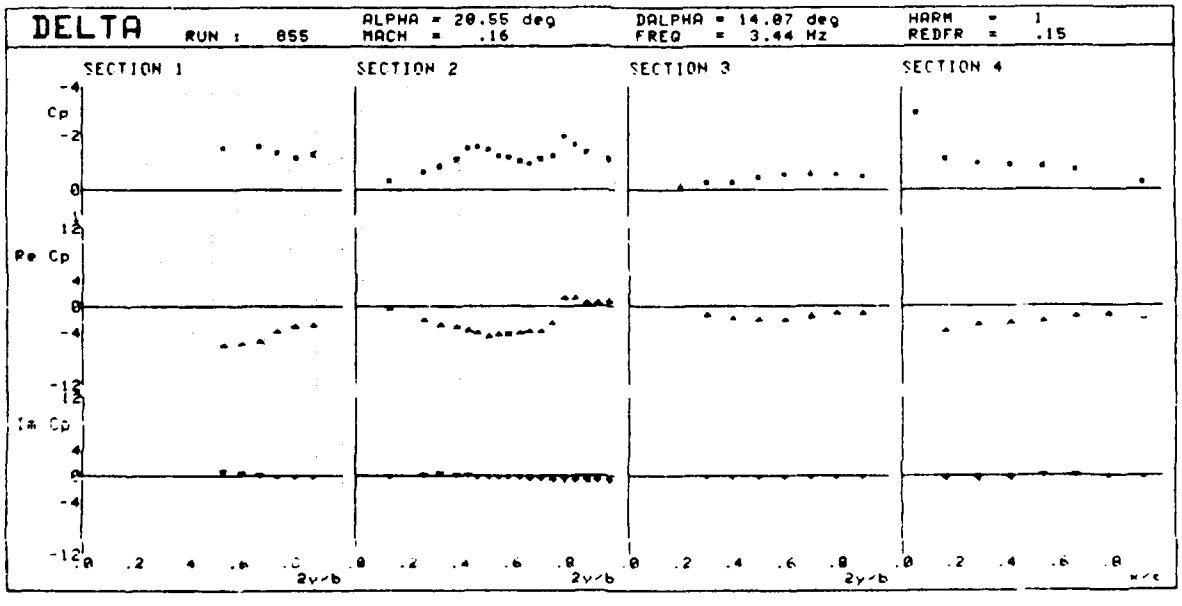

DELTA
RUN : 850
ALPHA = 20.74 deg
MACH = .16
DALPHA = 3.49 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

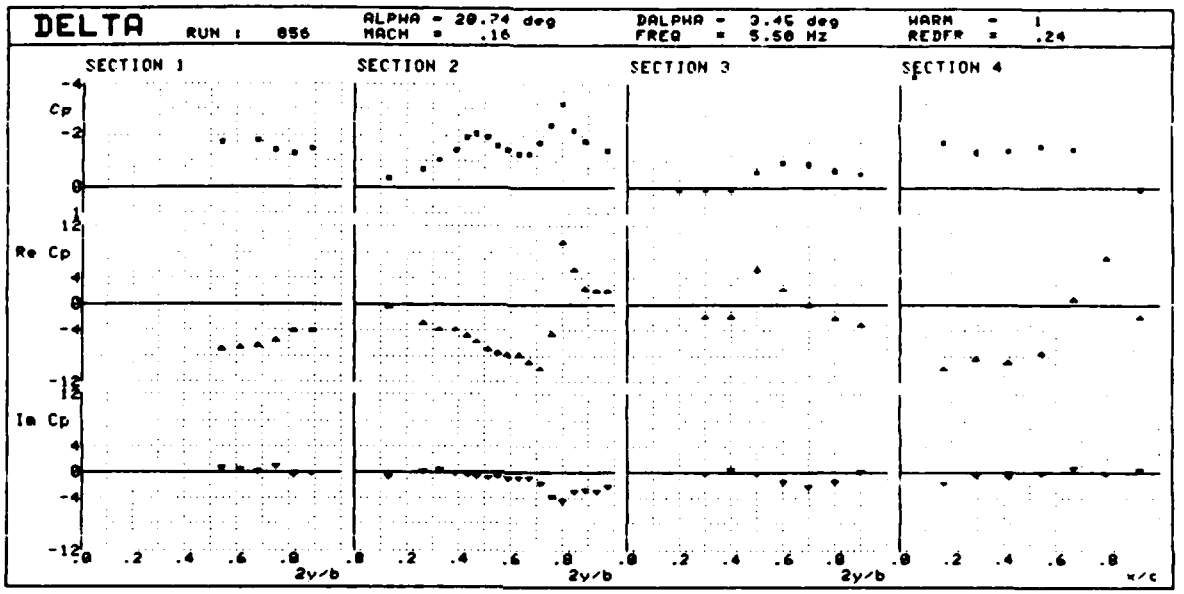

DELTA
RUN : 851
ALPHA = 20.66 deg
MACH = .16
DALPHA = 7.06 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

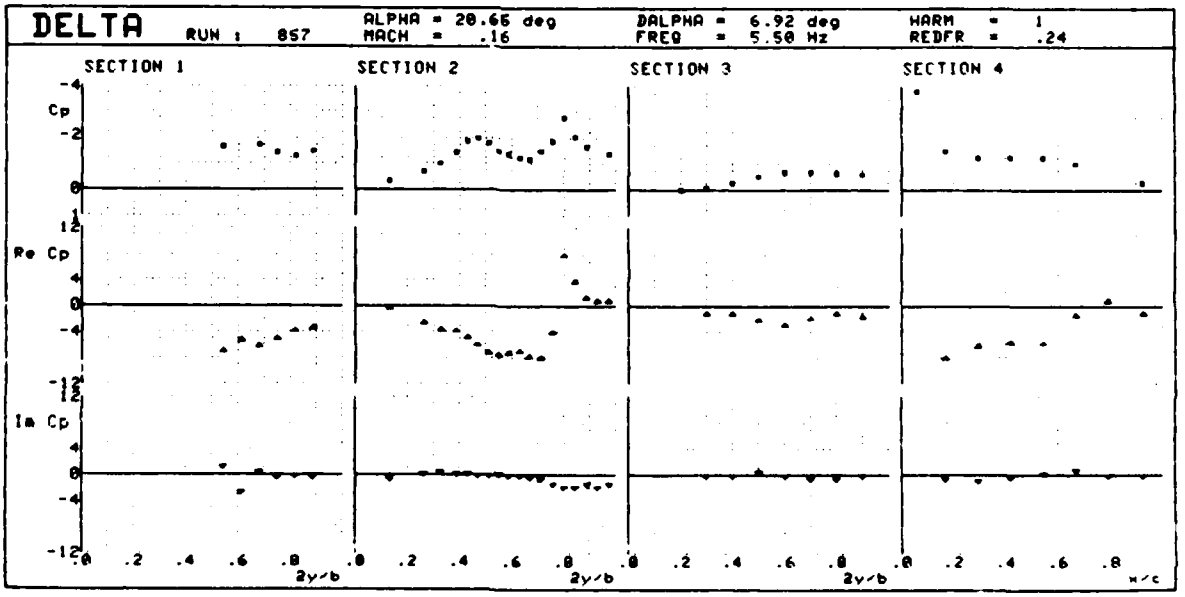

DELTA
RUN : 852
ALPHA = 20.64 deg
MACH = .16
DALPHA = 14.17 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

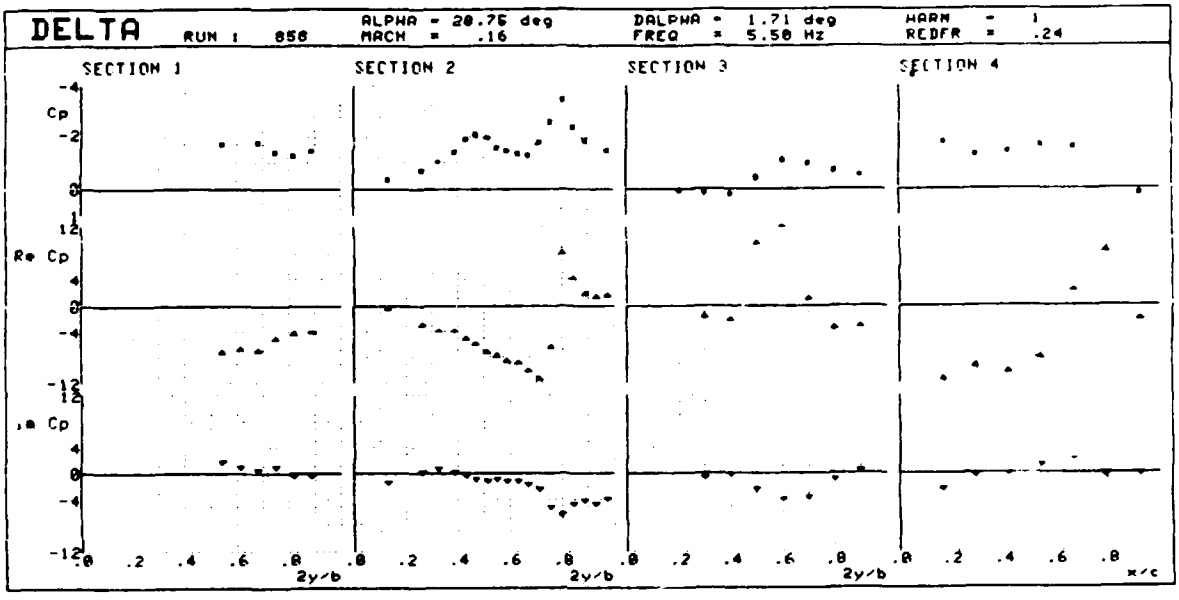

DELTA
RUN : 853
ALPHA = 20.72 deg
MACH = .16
DALPHA = 3.48 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

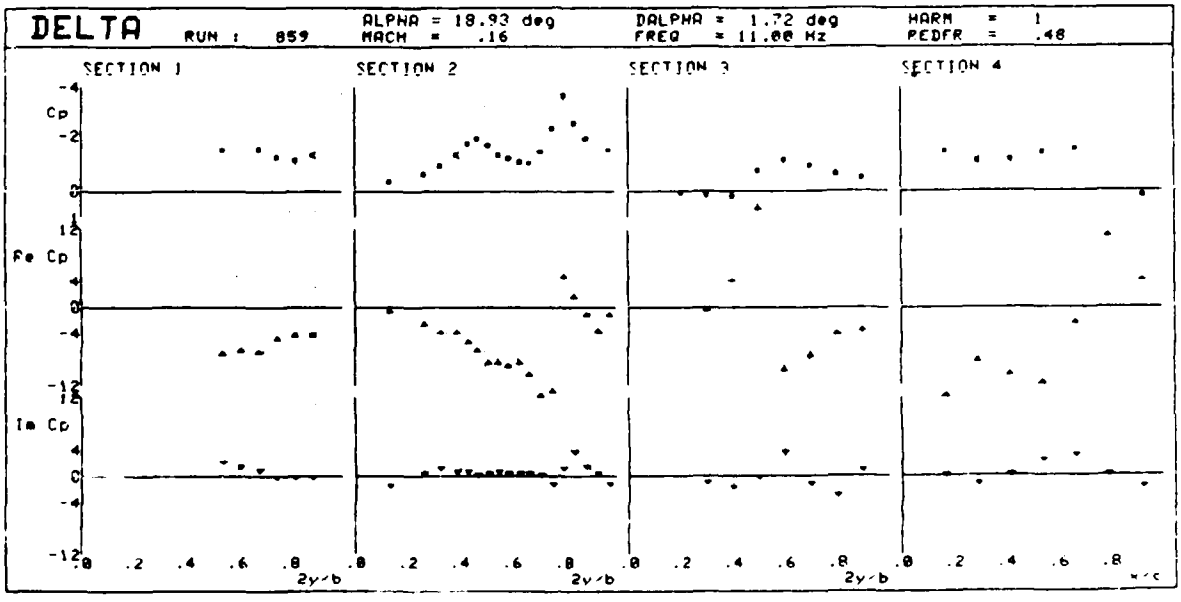

DELTA
RUN : 854
ALPHA = 20.68 deg
MACH = .16
DALPHA = 7.01 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

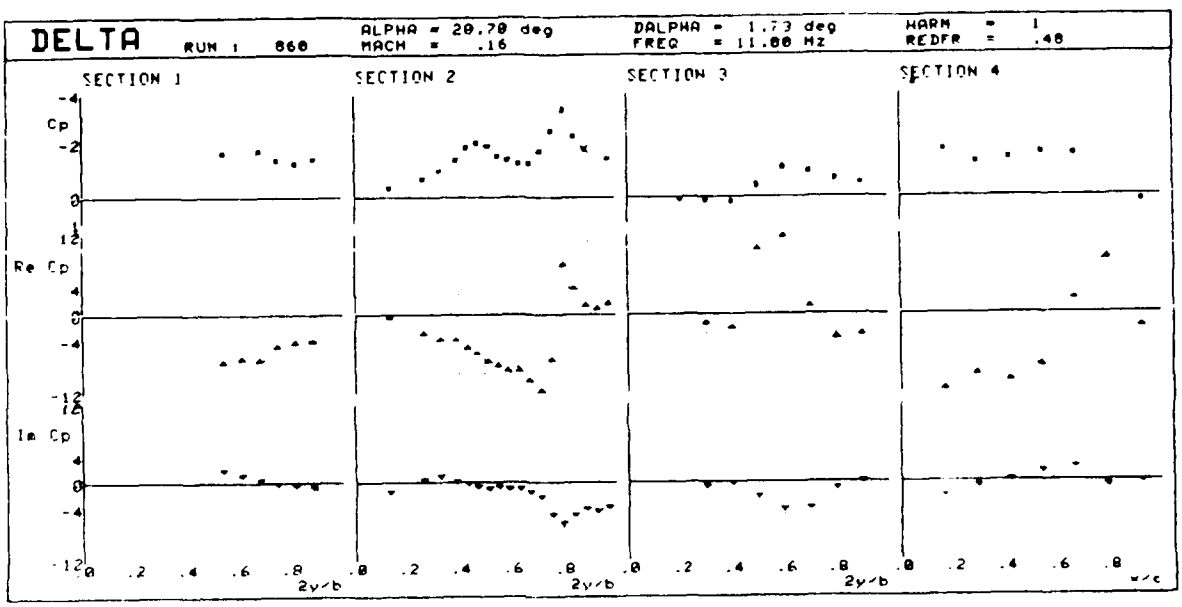

DELTA
RUN : 855
ALPHA = 20.55 deg
MACH = .16
DALPHA = 14.07 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

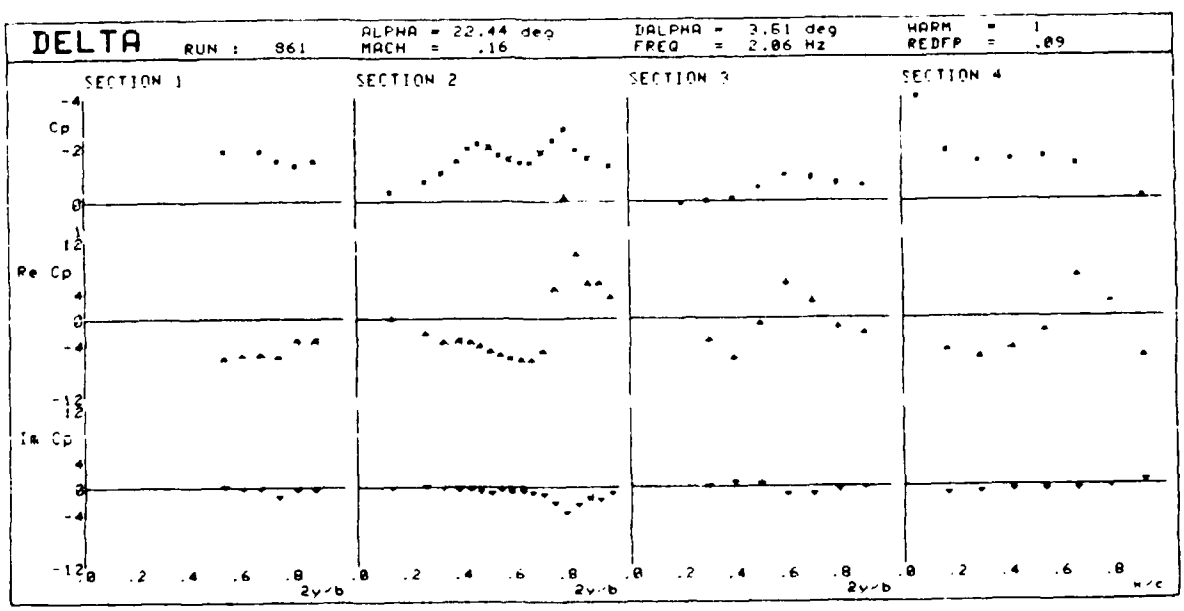

DELTA
RUN : 856
ALPHA = 20.74 deg
MACH = .16
DALPHA = 3.45 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

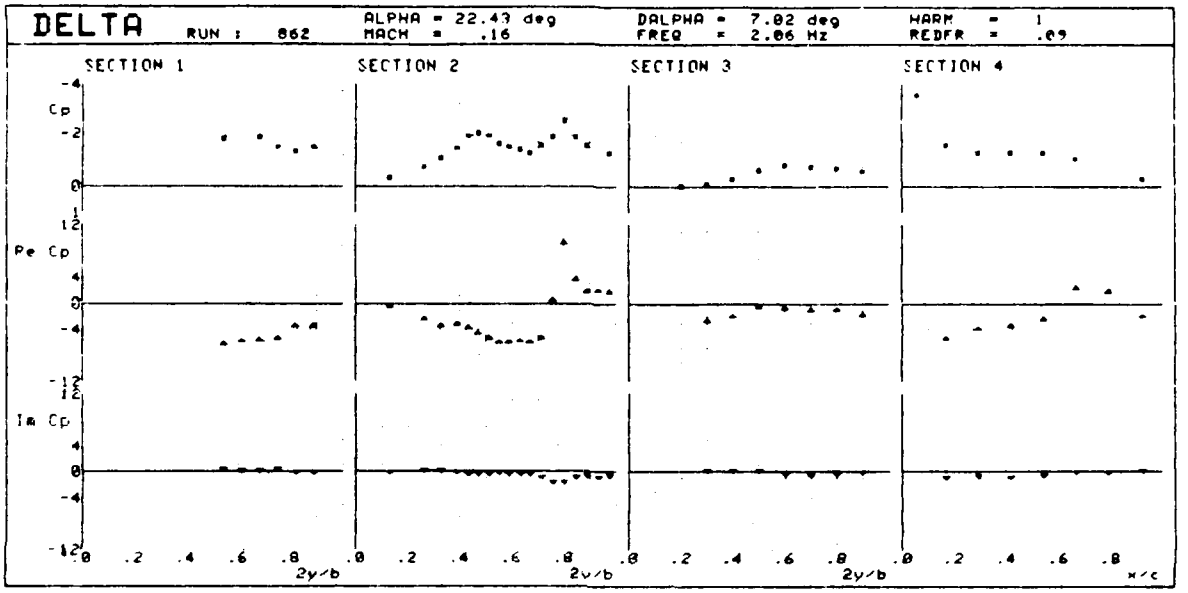

DELTA
RUN : 857
ALPHA = 20.66 deg
MACH = .16
DALPHA = 6.92 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

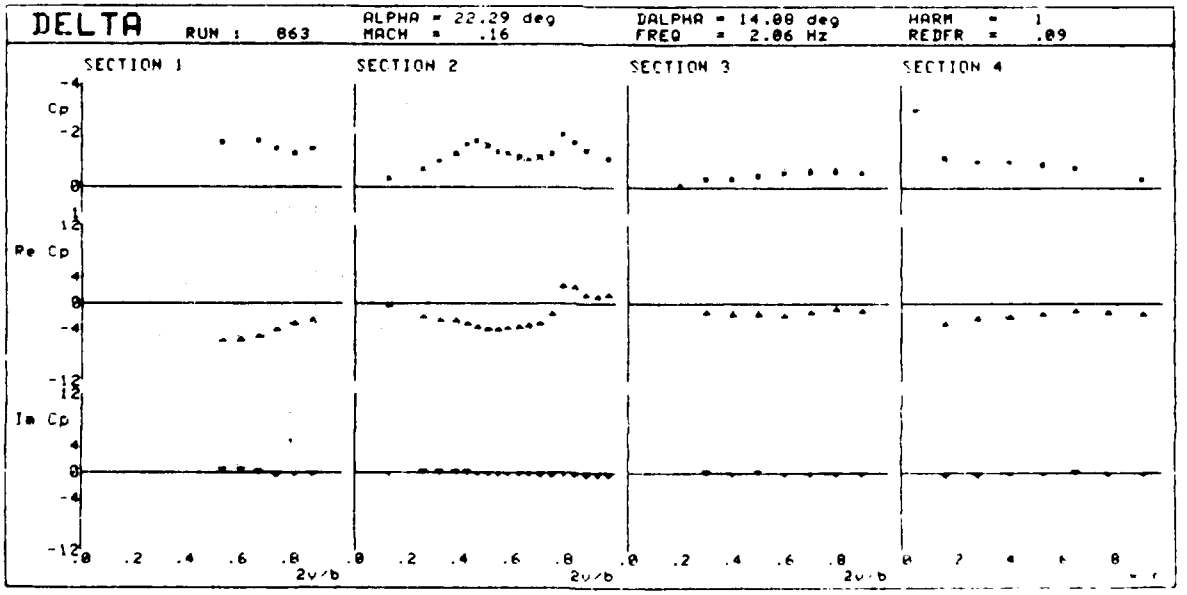

DELTA
RUN : 858
ALPHA = 20.75 deg
MACH = .16
DALPHA = 1.71 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

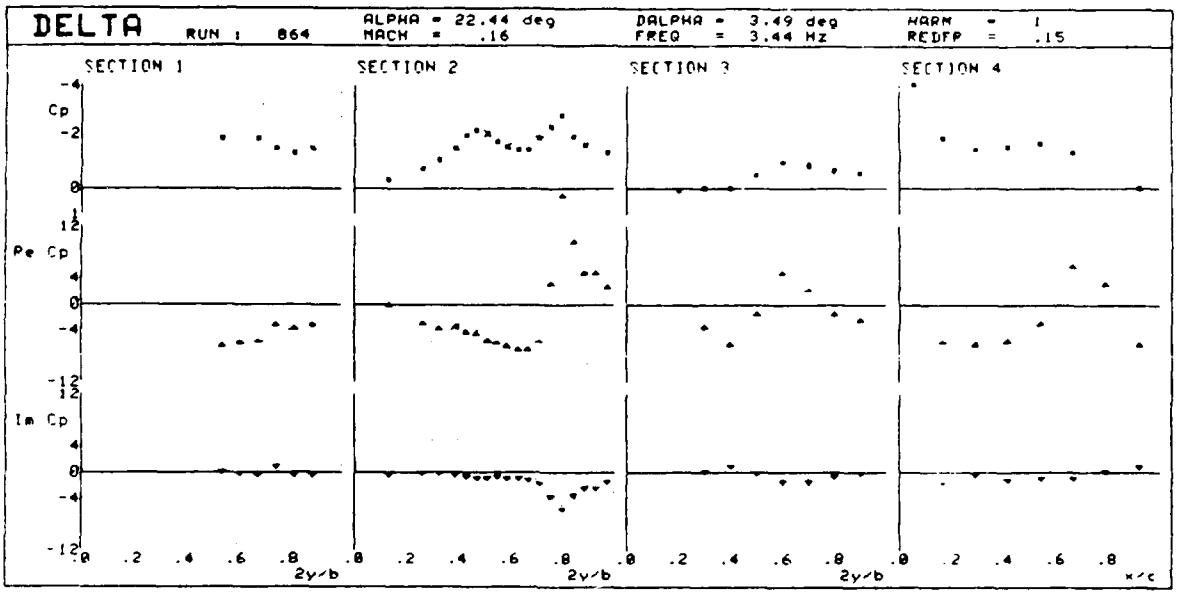

DELTA
RUN : 859
ALPHA = 18.93 deg
MACH = .16
DALPHA = 1.72 deg
FREQ = 11.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

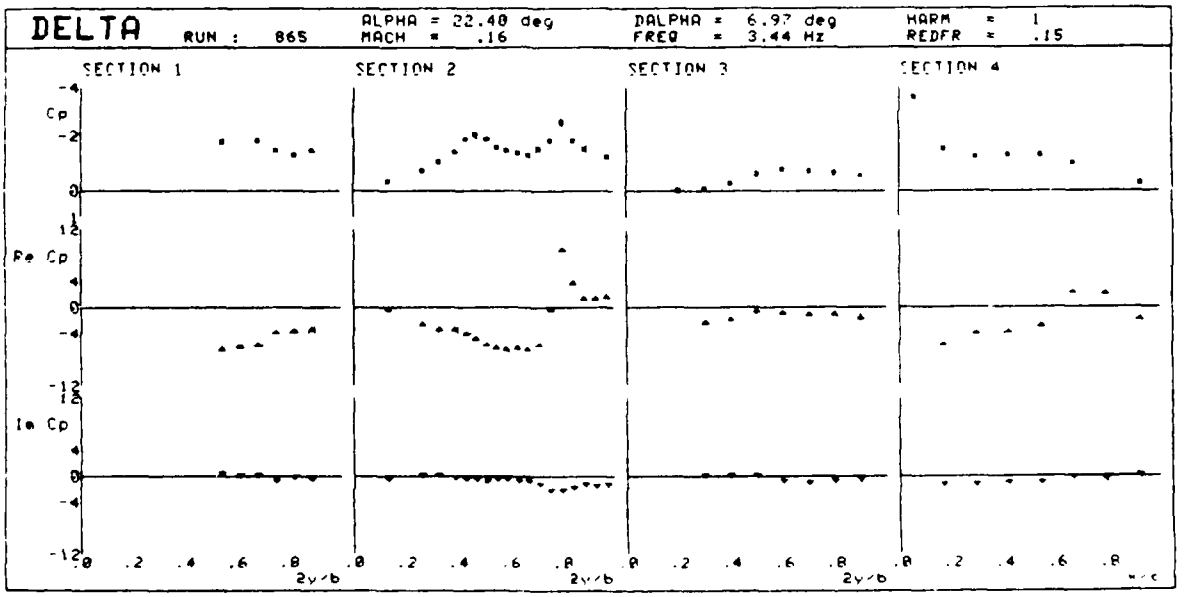

DELTA
RUN : 860
ALPHA = 20.70 deg
MACH = .16
DALPHA = 1.73 deg
FREQ = 11.00 Hz
HARM = 1
REDFR = .48
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

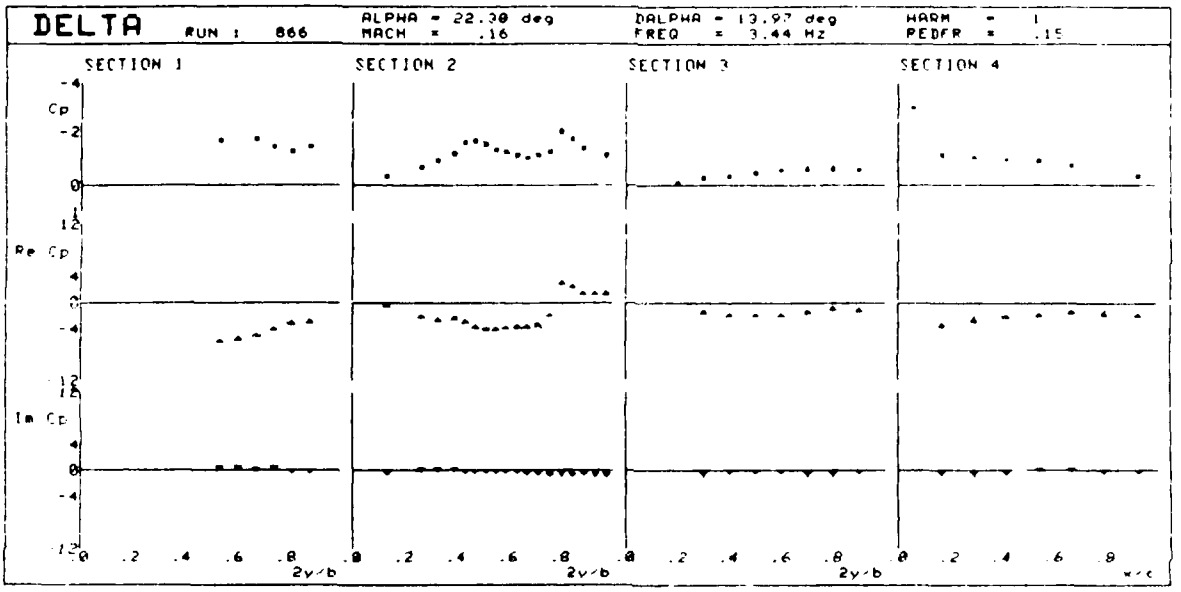

DELTA
RUN : 861
ALPHA = 22.44 deg
MACH = .16
DALPHA = 3.61 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

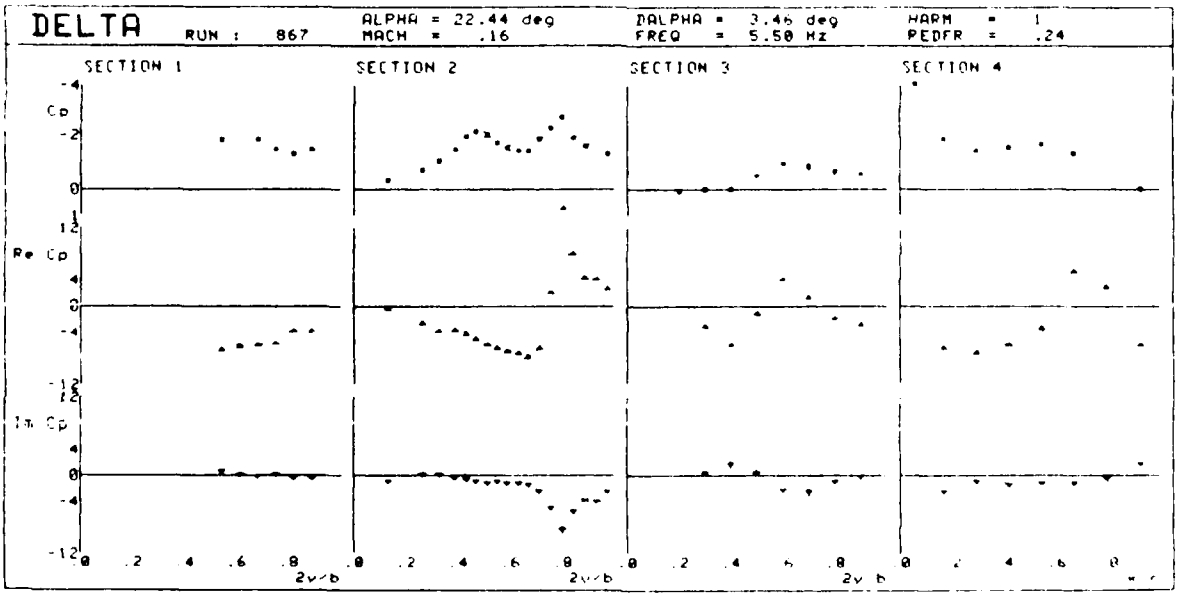

DELTA
RUN : 862
ALPHA = 22.43 deg
MACH = .16
DALPHA = 7.02 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

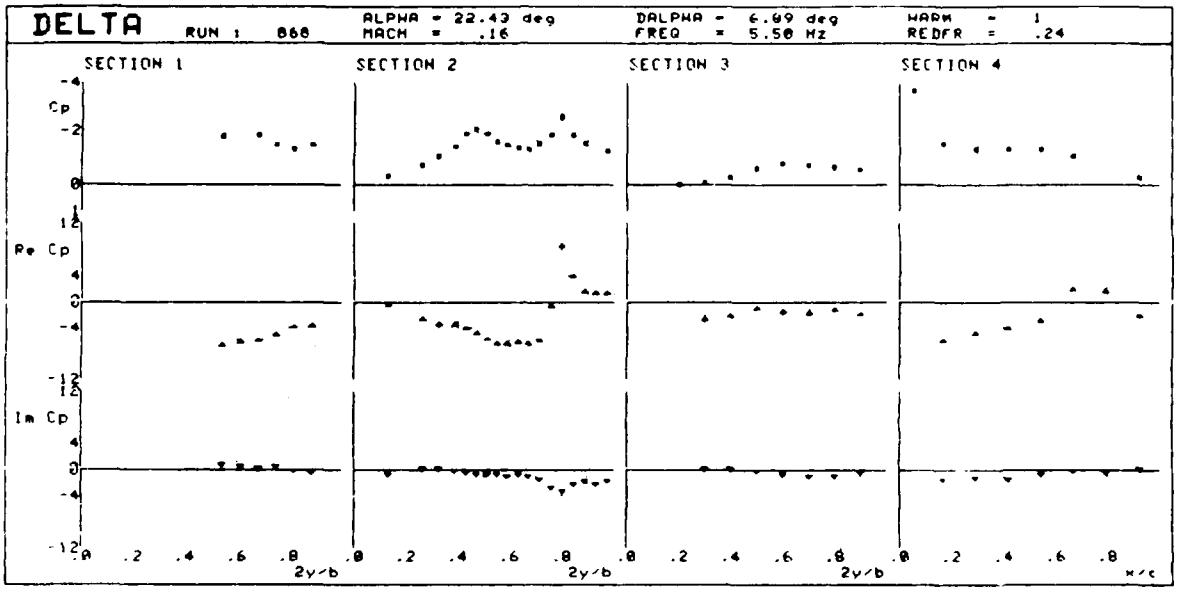

DELTA
RUN : 863
ALPHA = 22.29 deg
MACH = .16
DALPHA = 14.00 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

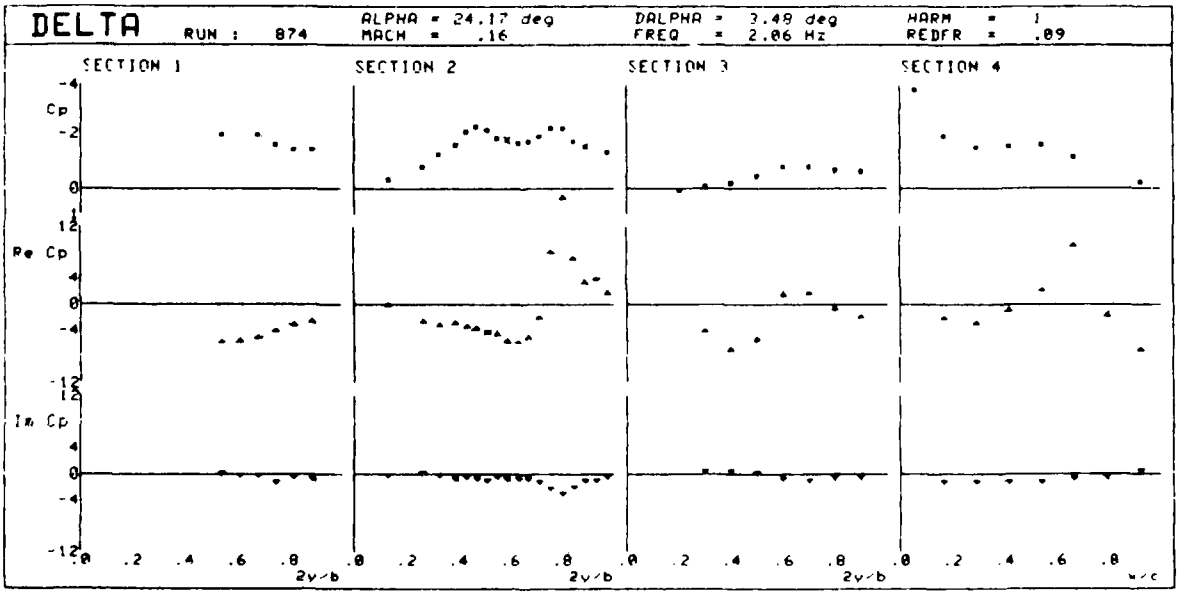

DELTA
RUN : 864
ALPHA = 22.44 deg
MACH = .16
DALPHA = 3.49 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

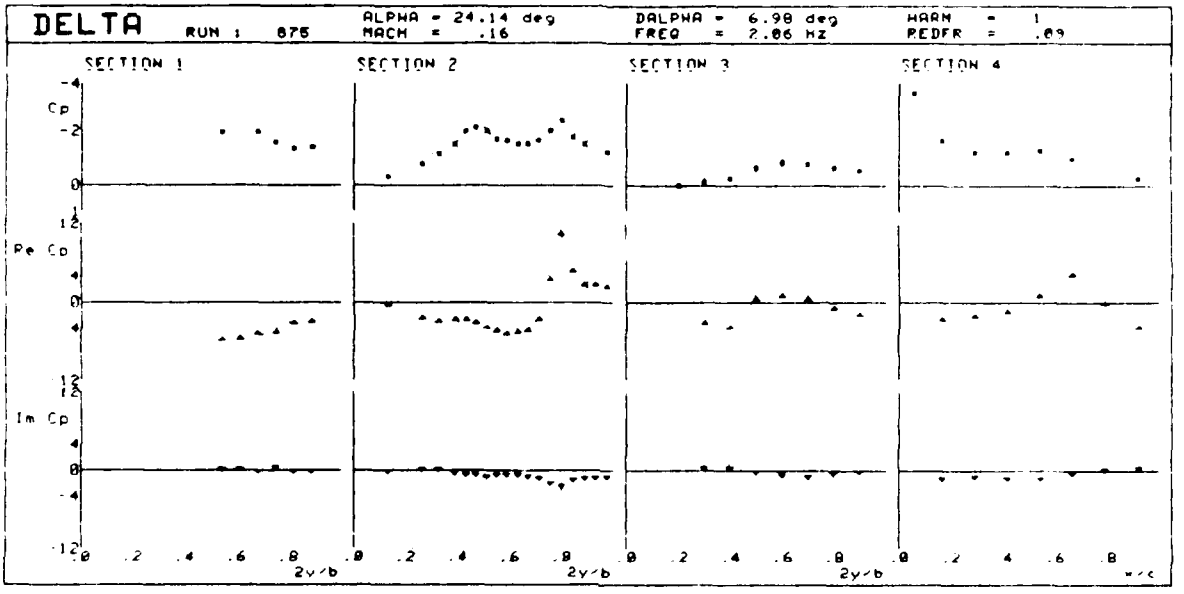

DELTA
RUN : 865
ALPHA = 22.48 deg
MACH = .16
DALPHA = 6.97 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

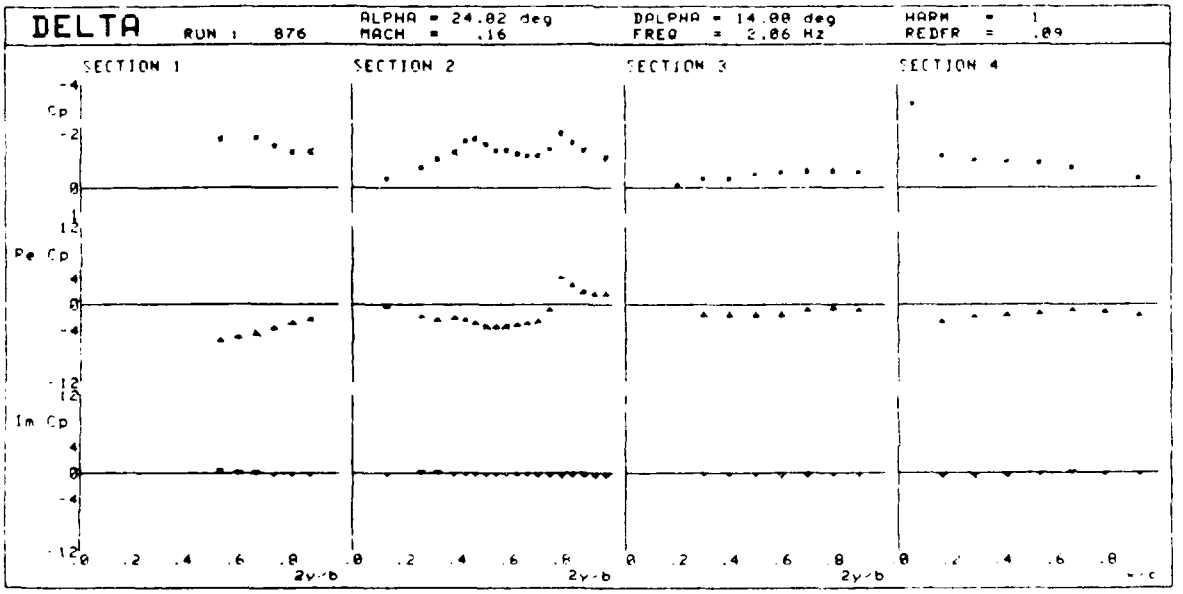

DELTA
RUN : 866
ALPHA = 22.30 deg
MACH = .16
DALPHA = 13.97 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

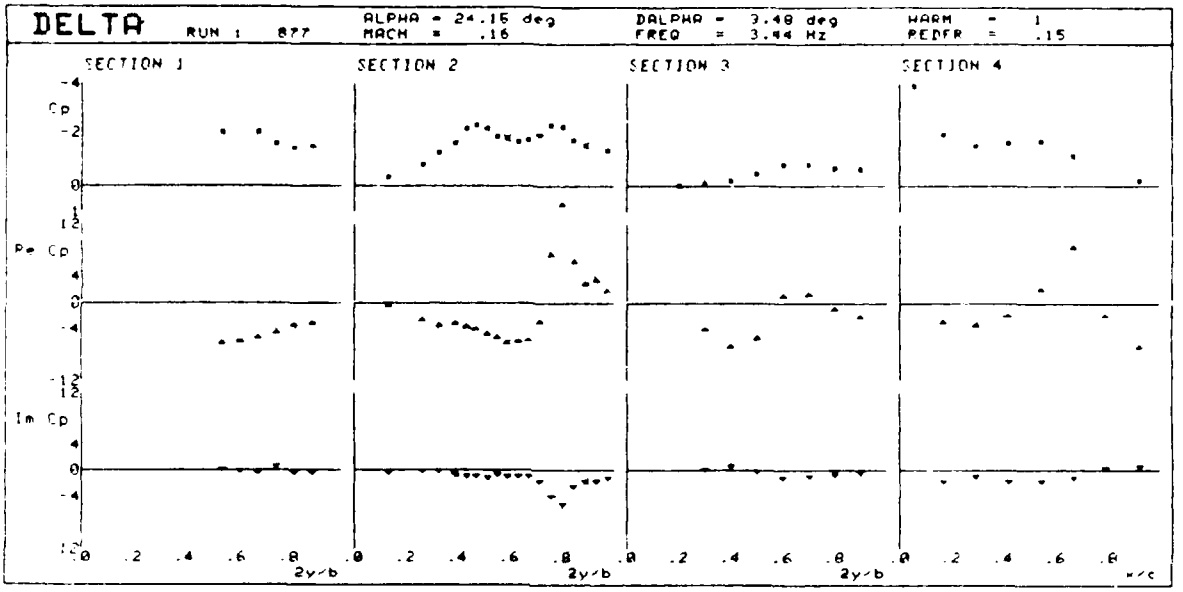

DELTA
RUN : 867
ALPHA = 22.44 deg
MACH = .16
DALPHA = 3.46 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

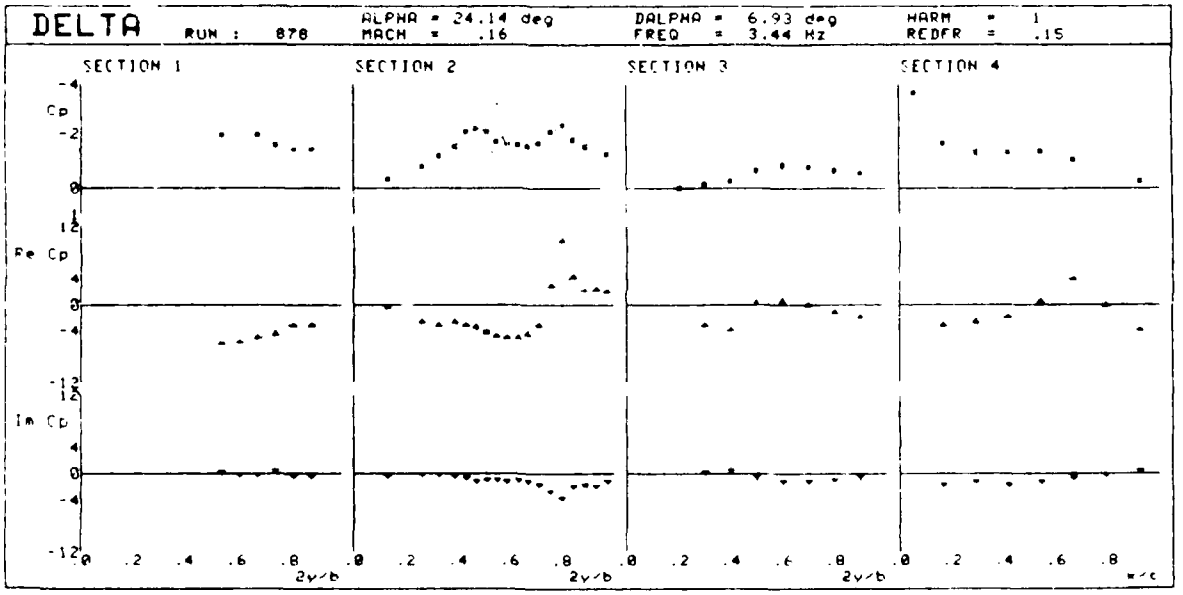

DELTA
RUN : 868
ALPHA = 22.43 deg
MACH = .16
DALPHA = 6.09 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .24
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

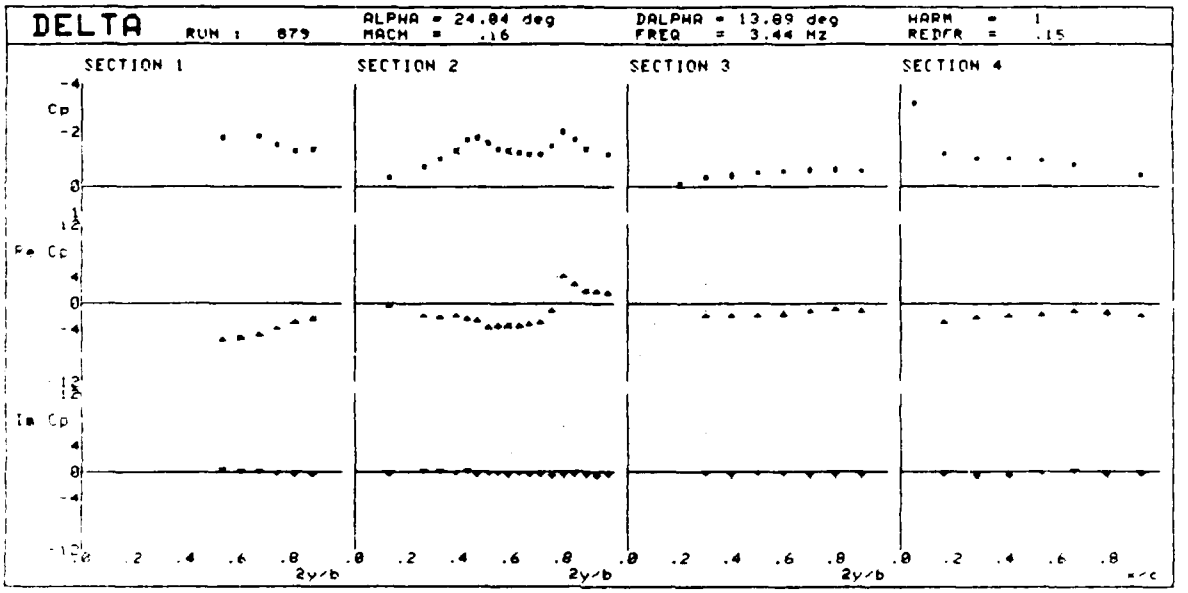

DELTA
RUN : 874
ALPHA = 24.17 deg
MACH = .16
DALPHA = 3.48 deg
FREQ = 2.86 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

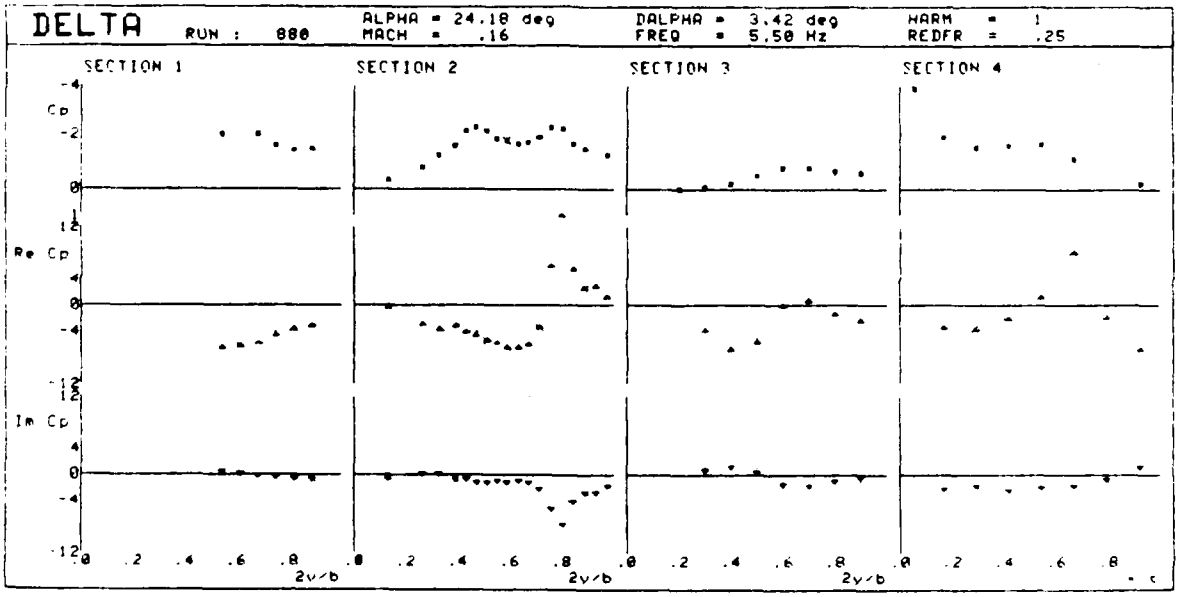

DELTA
RUN : 875
ALPHA = 24.14 deg
MACH = .16
DALPHA = 6.98 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

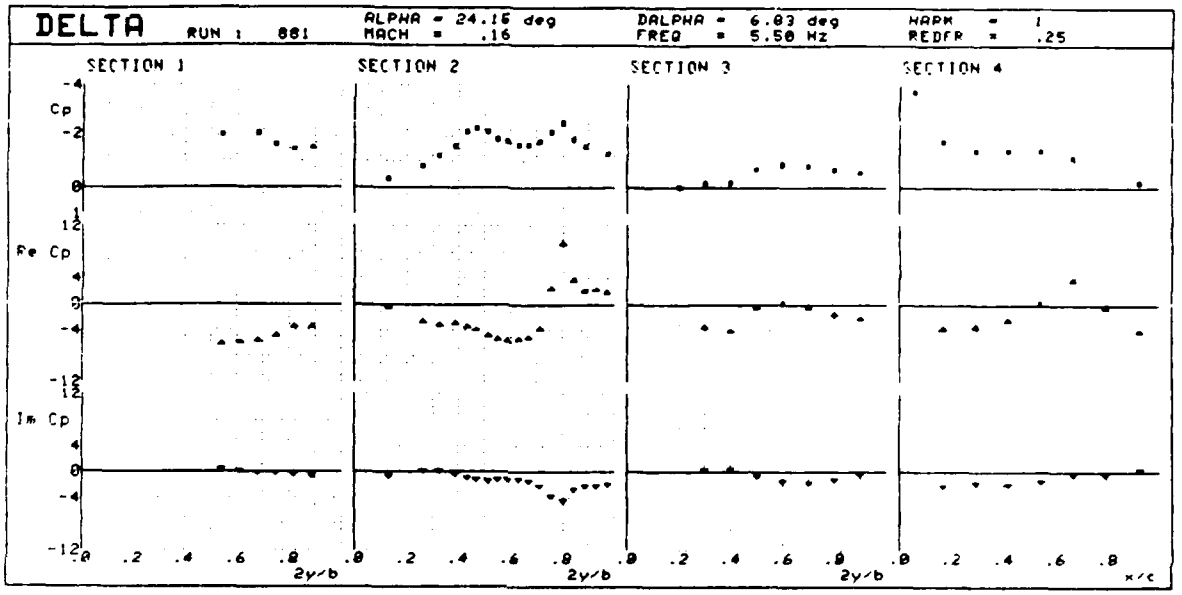

DELTA
RUN : 876
ALPHA = 24.02 deg
MACH = .16
DALPHA = 14.08 deg
FREQ = 2.06 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

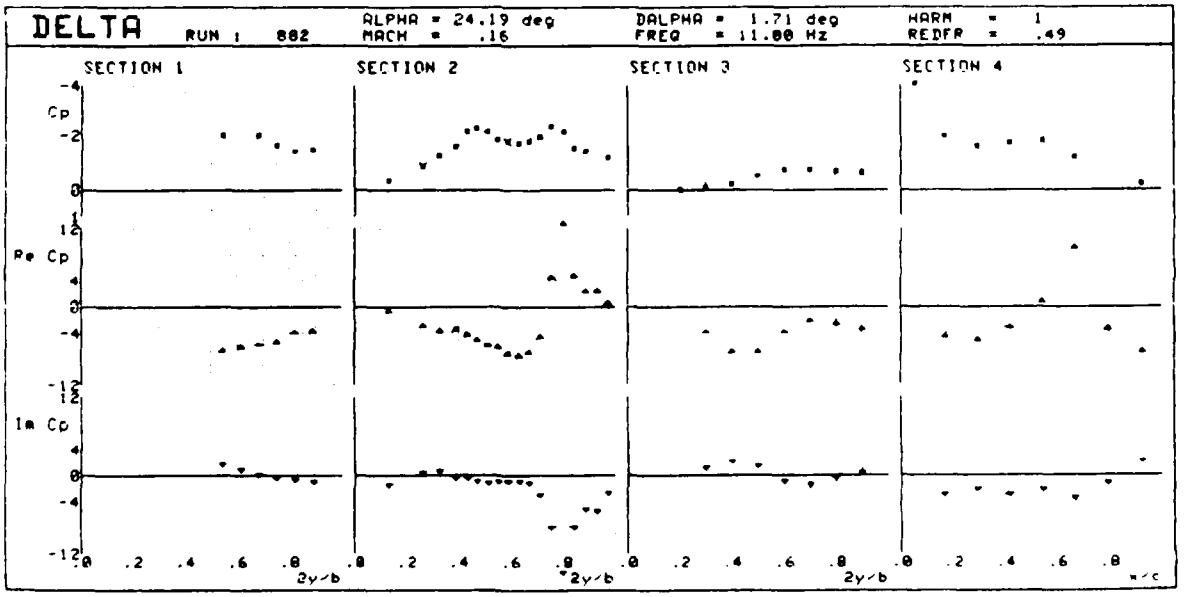

DELTA
RUN : 877
ALPHA = 24.15 deg
MACH = .16
DALPHA = 3.48 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

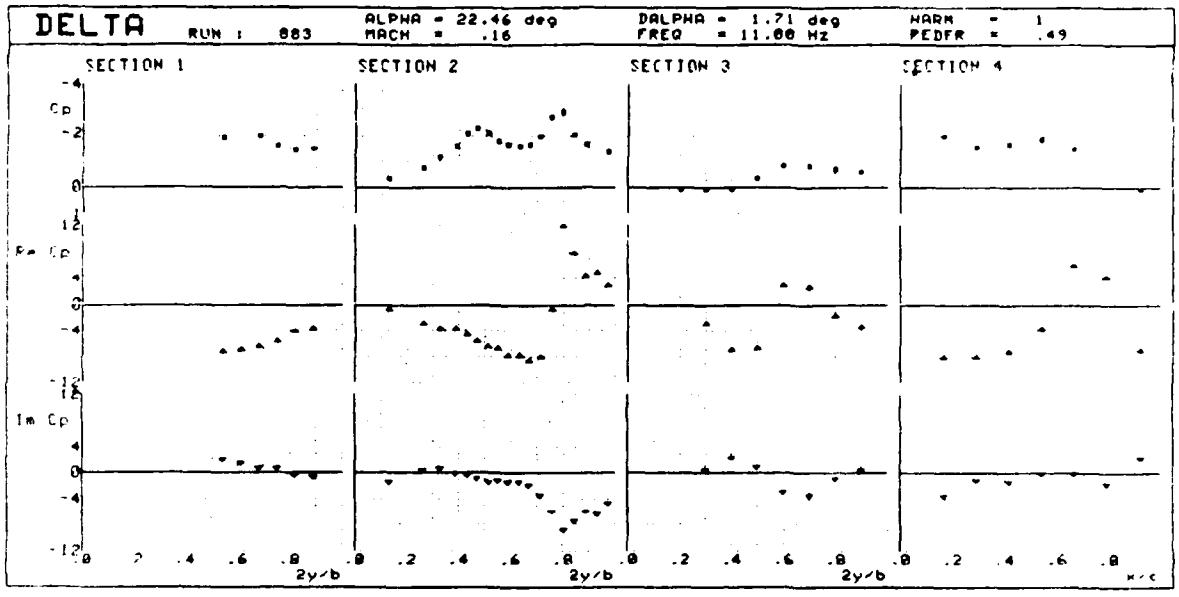

DELTA
RUN : 878
ALPHA = 24.14 deg
MACH = .16
DALPHA = 6.93 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

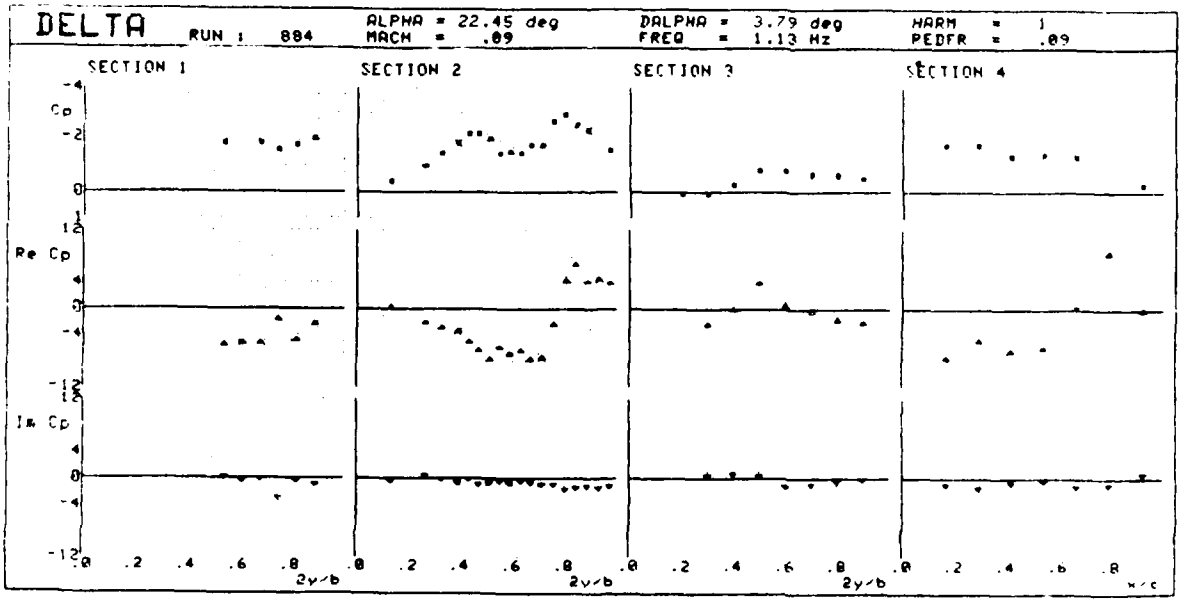

DELTA
RUN : 879
ALPHA = 24.04 deg
MACH = .16
DALPHA = 13.89 deg
FREQ = 3.44 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

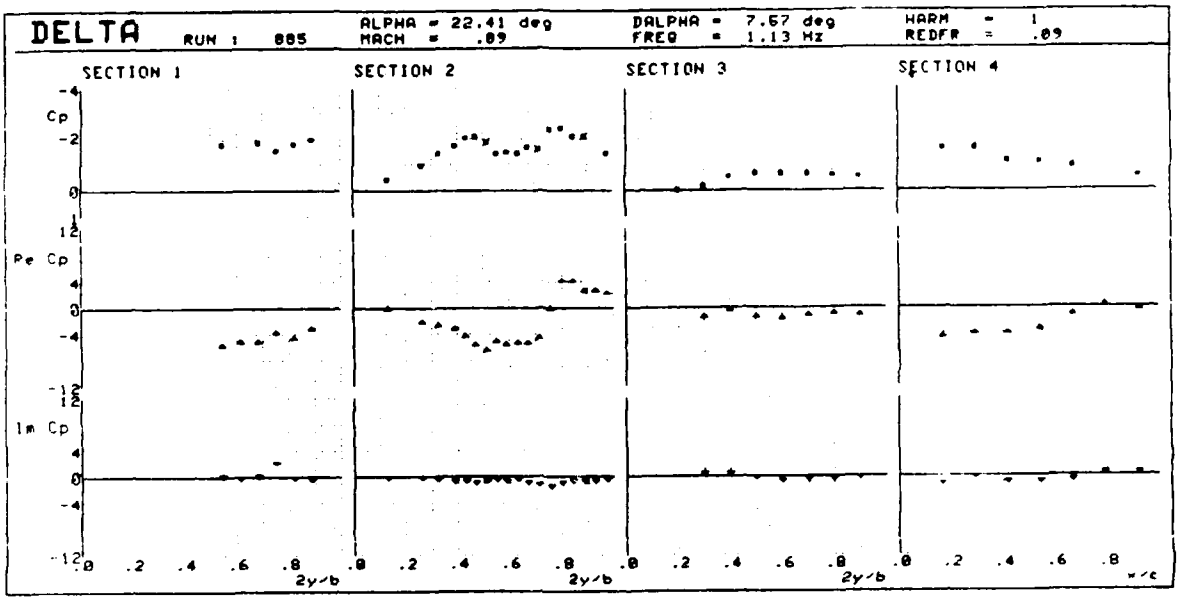

DELTA
RUN : 880
ALPHA = 24.18 deg
MACH = .16
DALPHA = 3.42 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

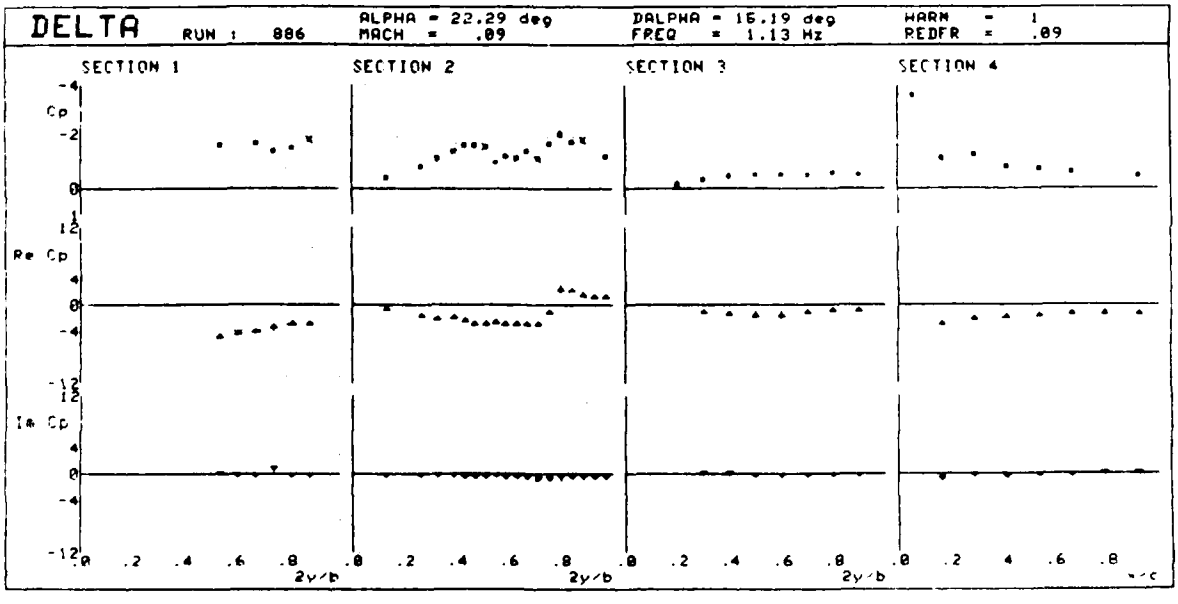

DELTA
RUN : 881
ALPHA = 24.15 deg
MACH = .16
DALPHA = 6.03 deg
FREQ = 5.50 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

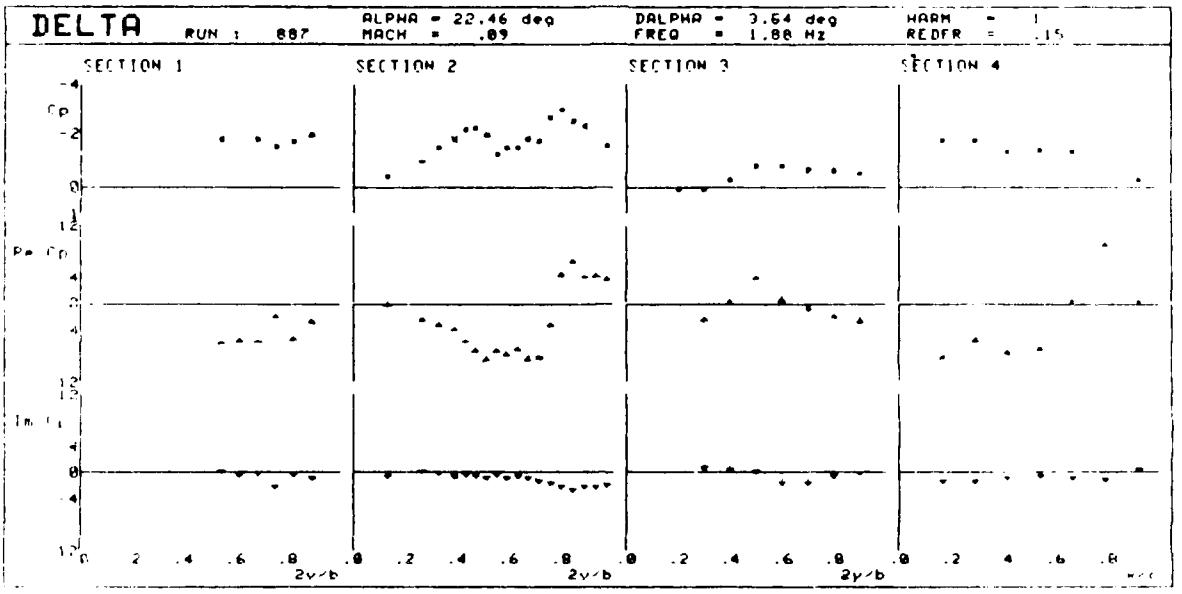

DELTA
RUN : 882
ALPHA = 24.19 deg
MACH = .16
DALPHA = 1.71 deg
FREQ = 11.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

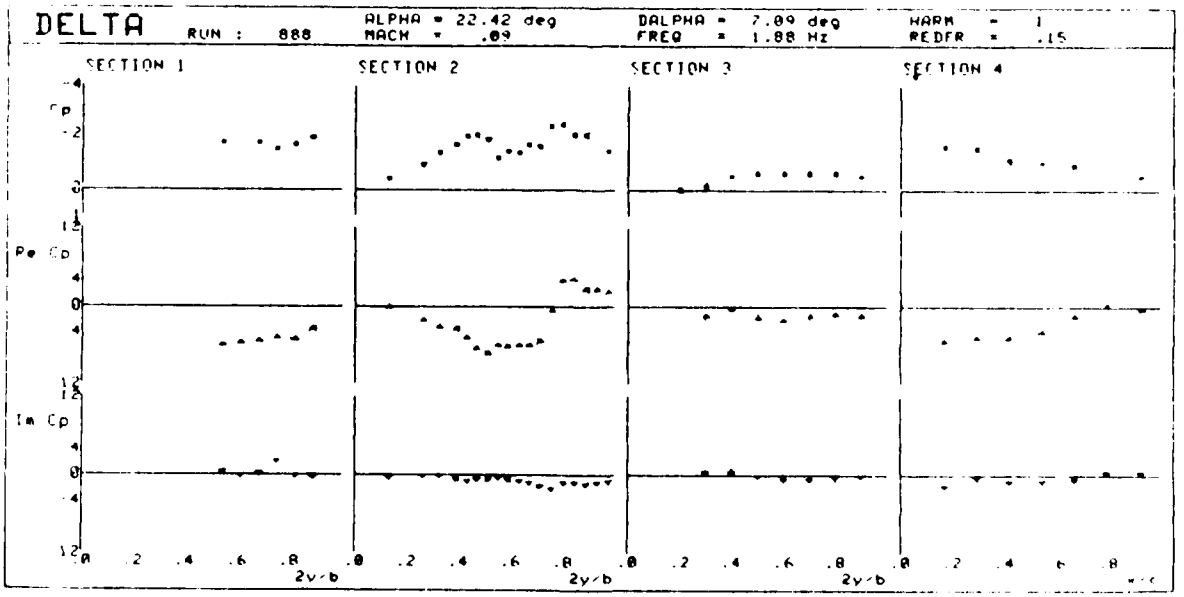

DELTA
RUN : 883
ALPHA = 22.46 deg
MACH = .16
DALPHA = 1.71 deg
FREQ = 11.00 Hz
HARM = 1
PEDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

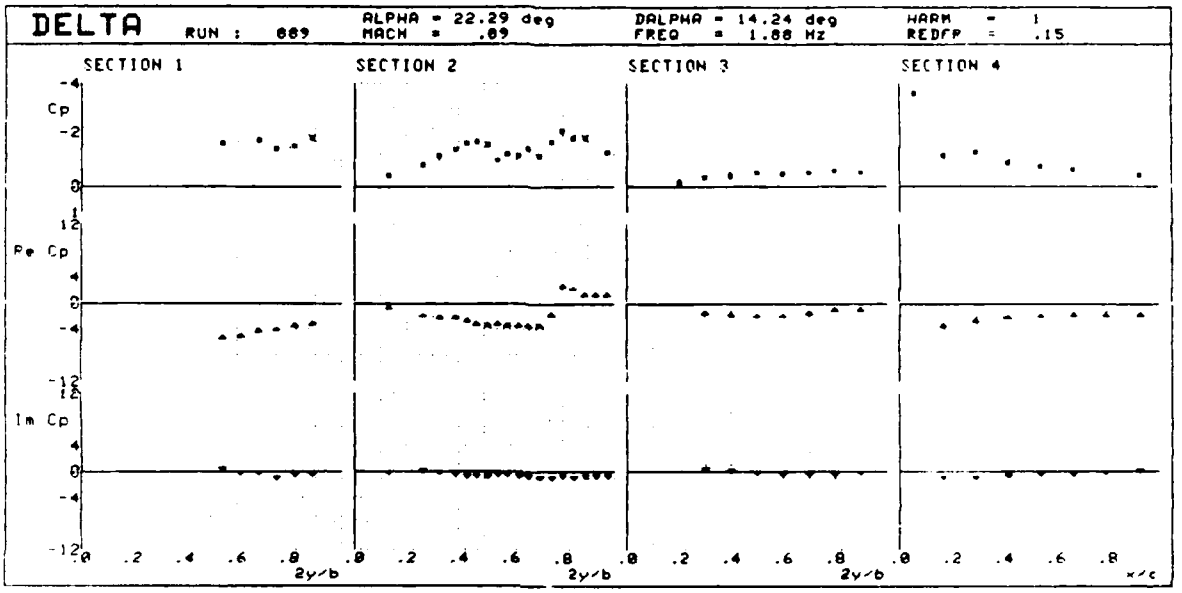

DELTA
RUN : 884
ALPHA = 22.45 deg
MACH = .09
DALPHA = 3.79 deg
FREQ = 1.13 Hz
HARM = 1
PEDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

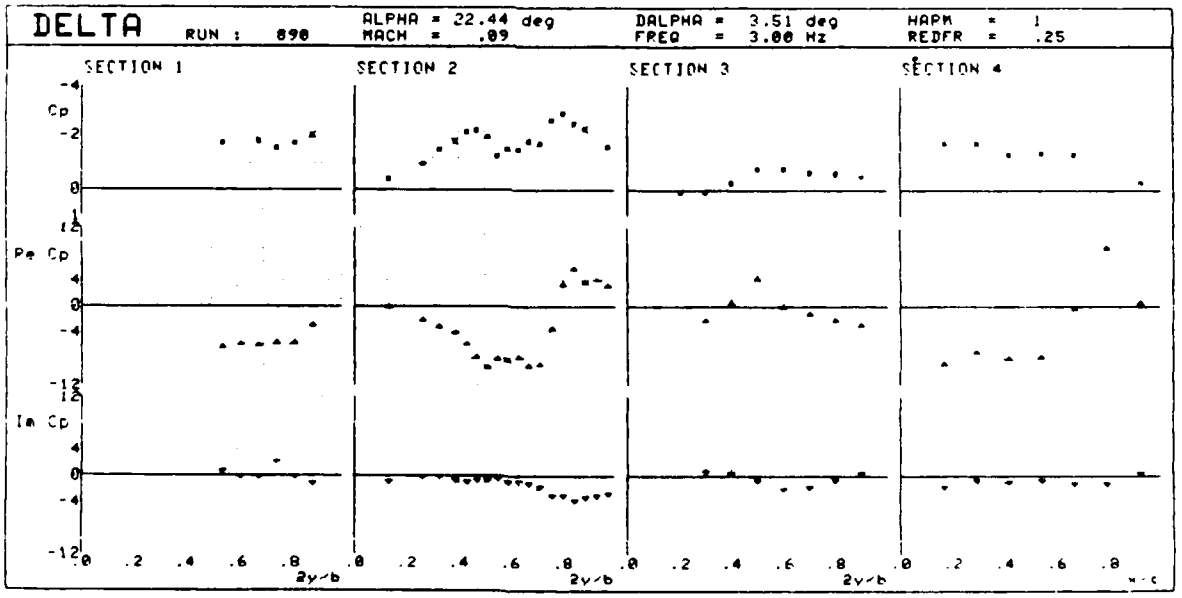

DELTA
RUN : 885
ALPHA = 22.41 deg
MACH = .09
DALPHA = 7.67 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

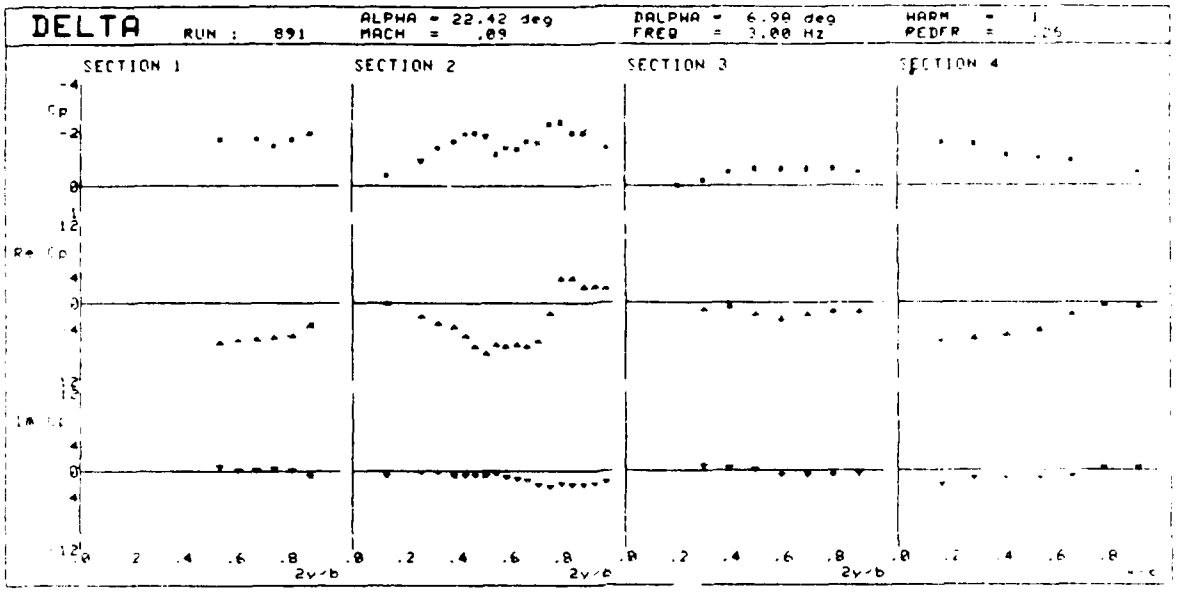

DELTA
RUN : 886
ALPHA = 22.29 deg
MACH = .09
DALPHA = 15.19 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

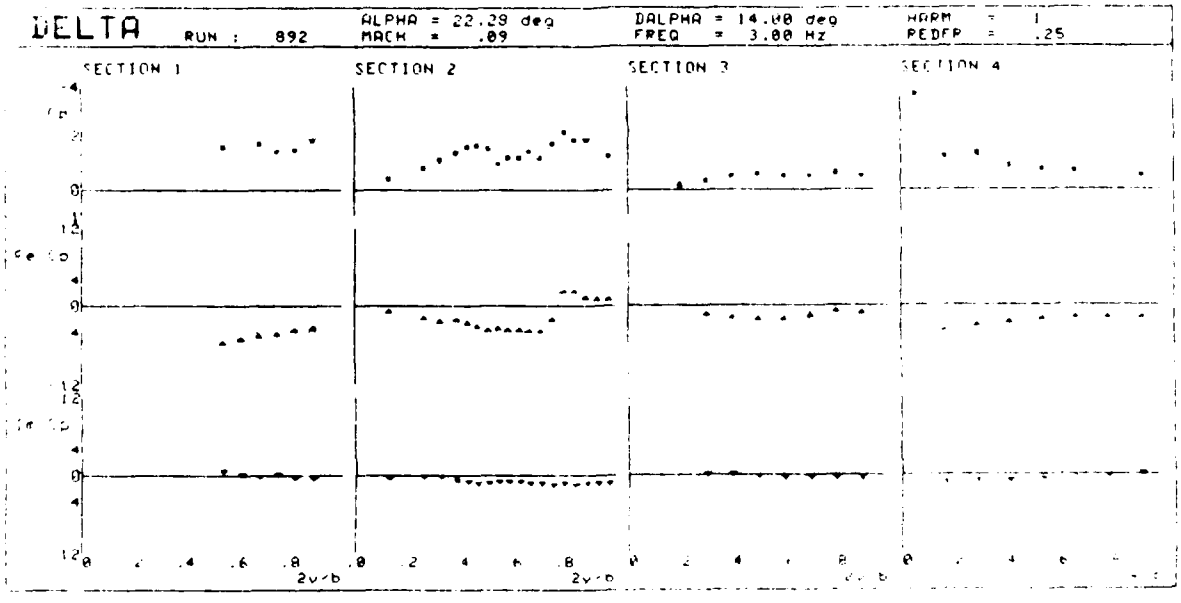

DELTA
RUN : 887
ALPHA = 22.46 deg
MACH = .89
DALPHA = 3.64 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

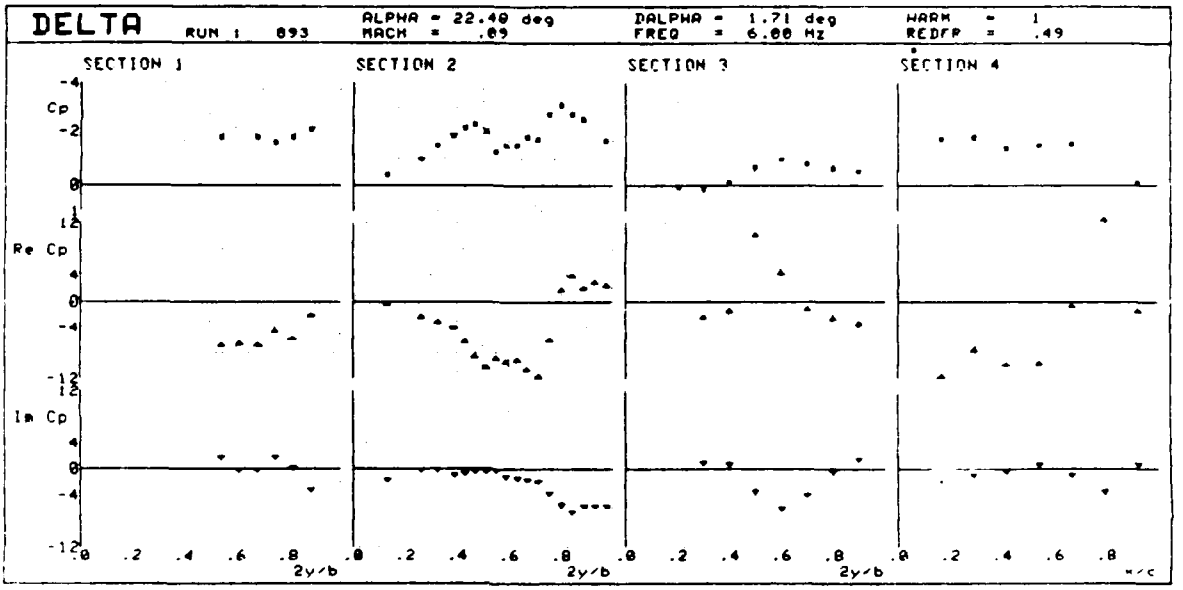

DELTA
RUN : 888
ALPHA = 22.42 deg
MACH = .89
DALPHA = 7.09 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

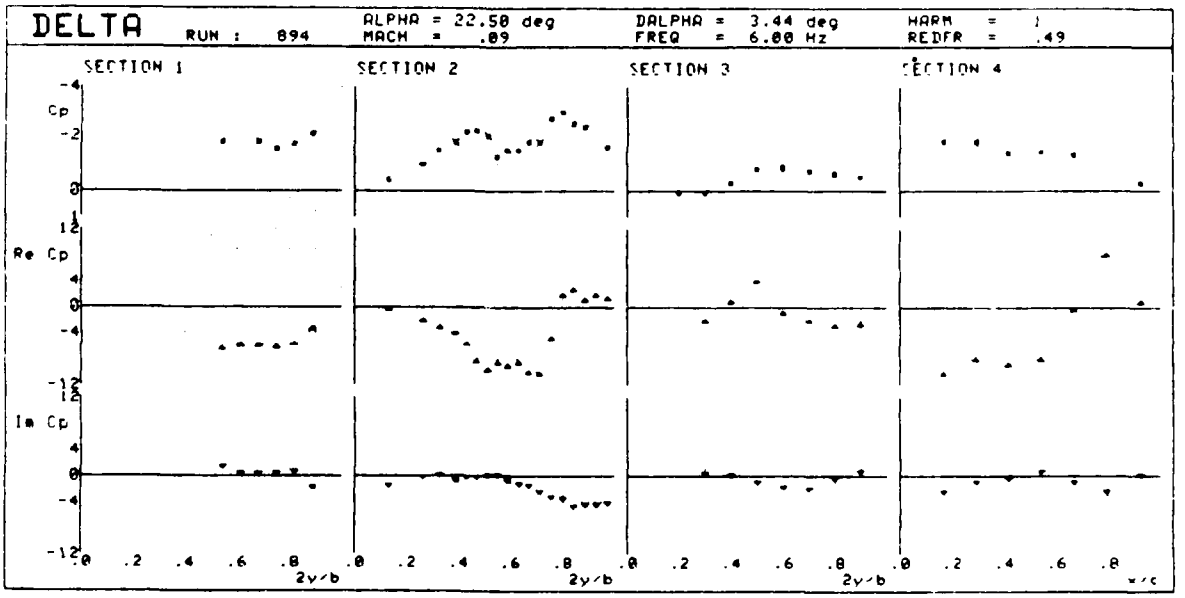

DELTA
RUN : 889
ALPHA = 22.29 deg
MACH = .89
DALPHA = 14.24 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

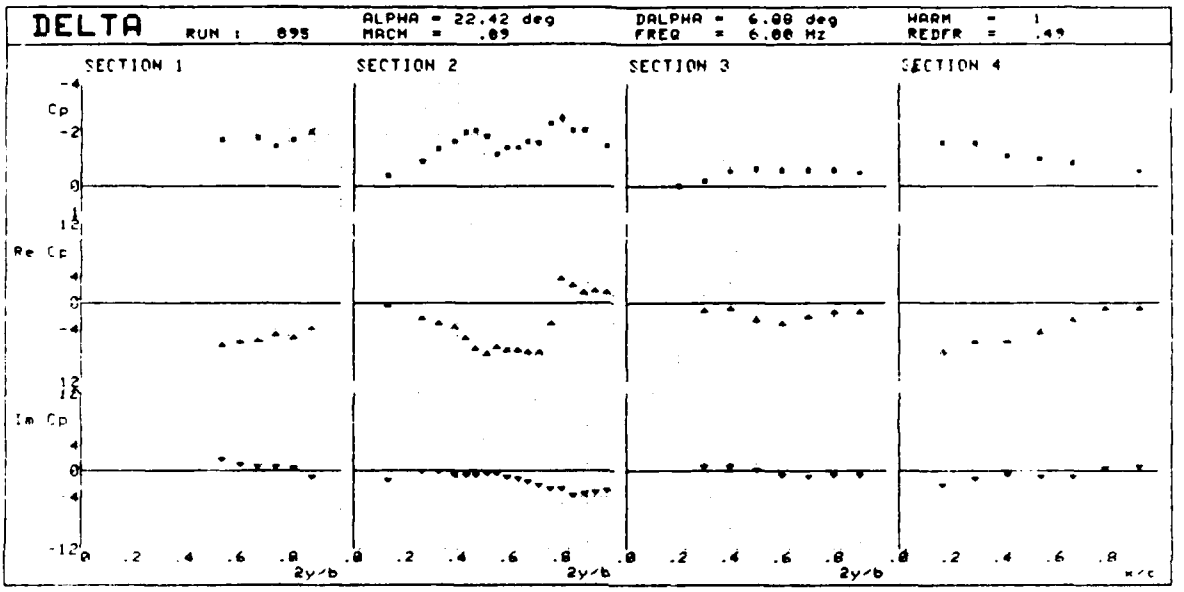

DELTA
RUN : 890
ALPHA = 22.44 deg
MACH = .89
DALPHA = 3.51 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

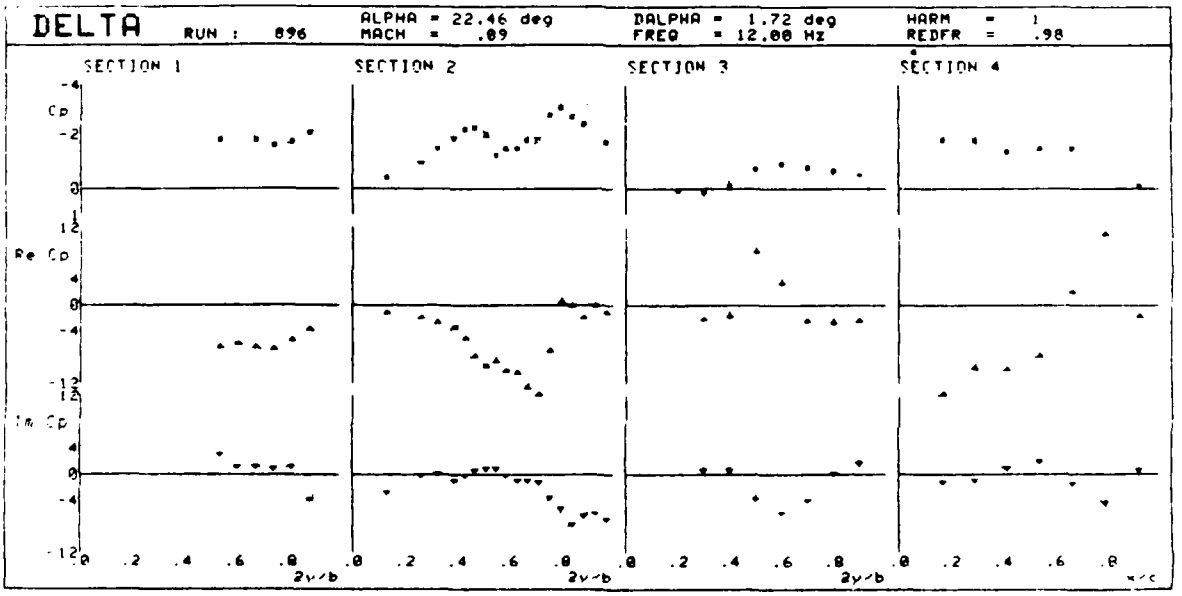

DELTA
RUN : 891
ALPHA = 22.42 deg
MACH = .09
DALPHA = 6.98 deg
FREQ = 3.00 Hz
HARM = 1
PEDER = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

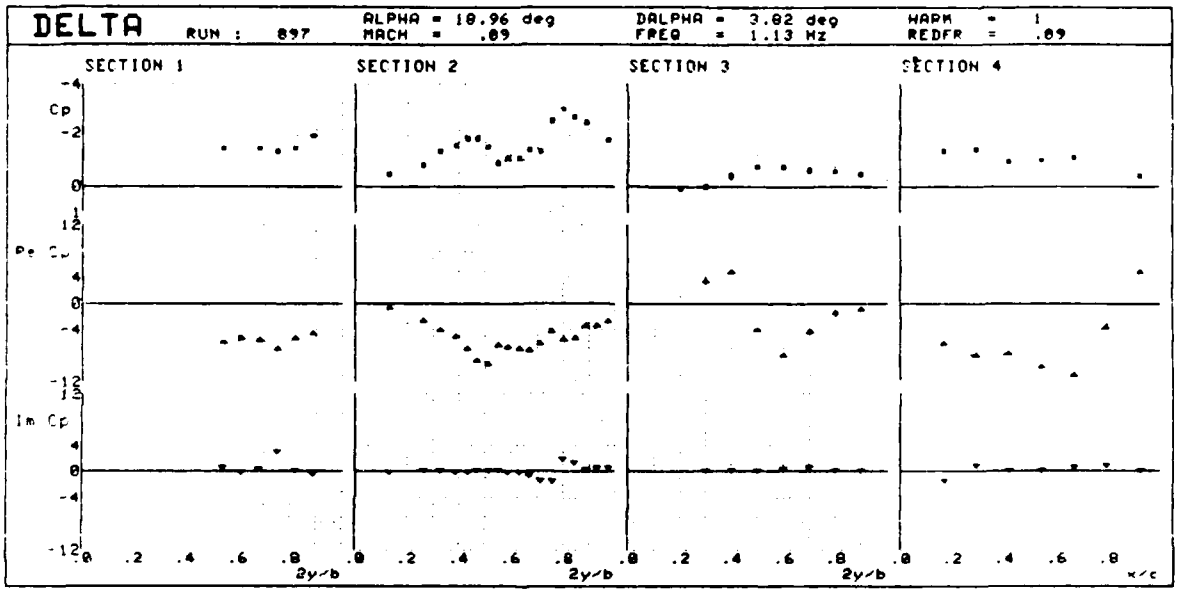

DELTA
RUN : 892
ALPHA = 22.29 deg
MACH = .09
DALPHA = 14.00 deg
FREQ = 3.00 Hz
HARM = 1
PEDER = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

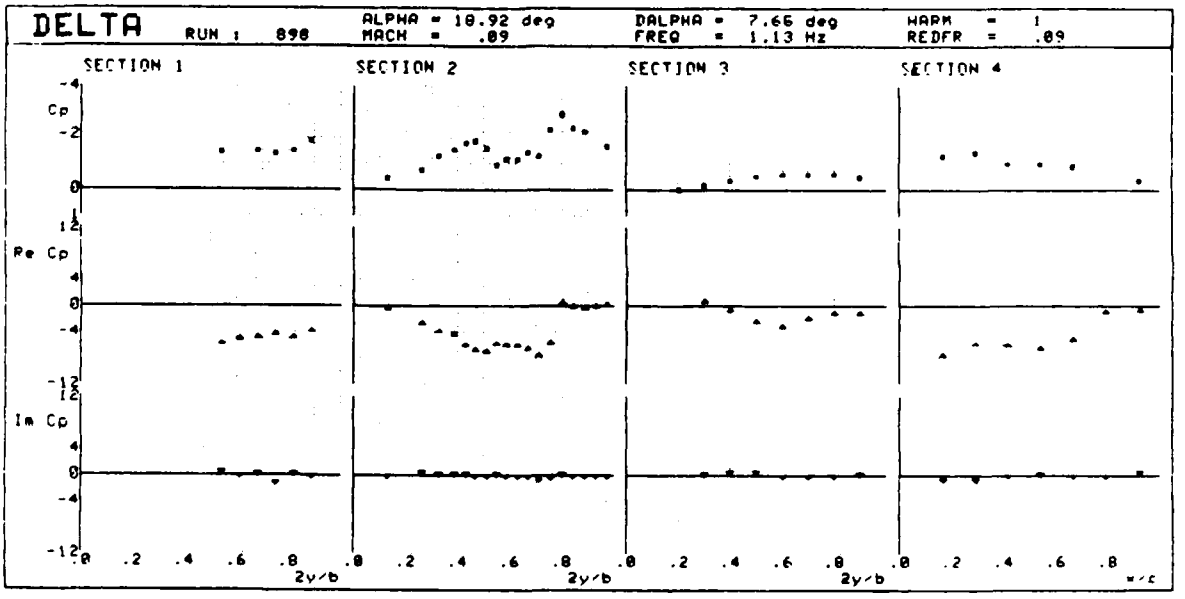

DELTA
RUN : 893
ALPHA = 22.40 deg
MACH = .89
DALPHA = 1.71 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

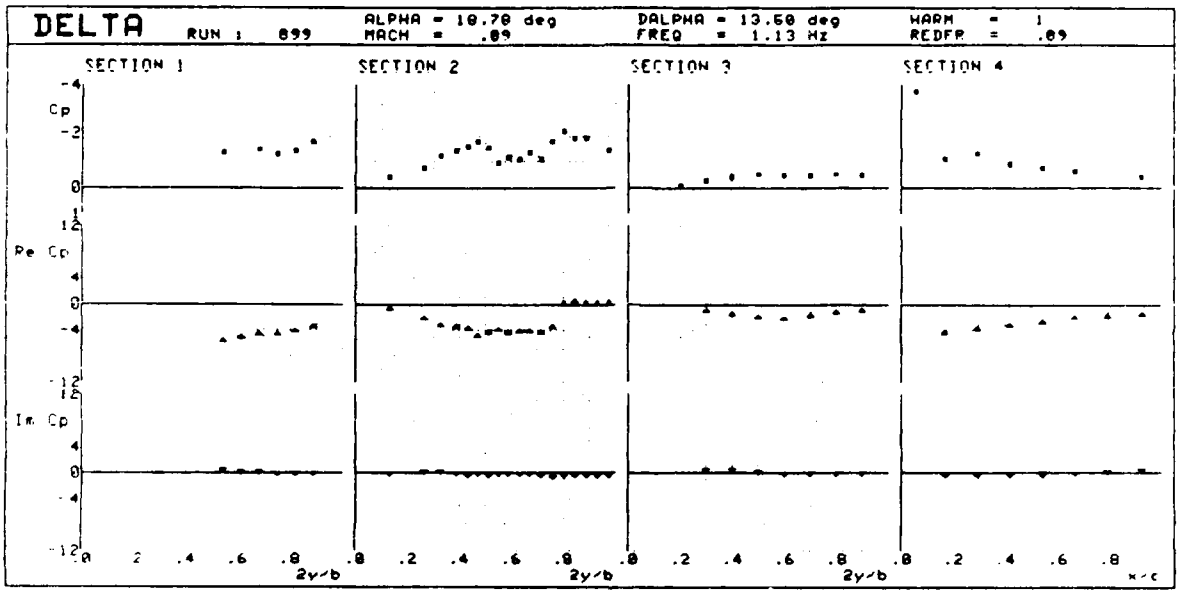

DELTA
RUN : 894
ALPHA = 22.50 deg
MACH = .89
DALPHA = 3.44 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

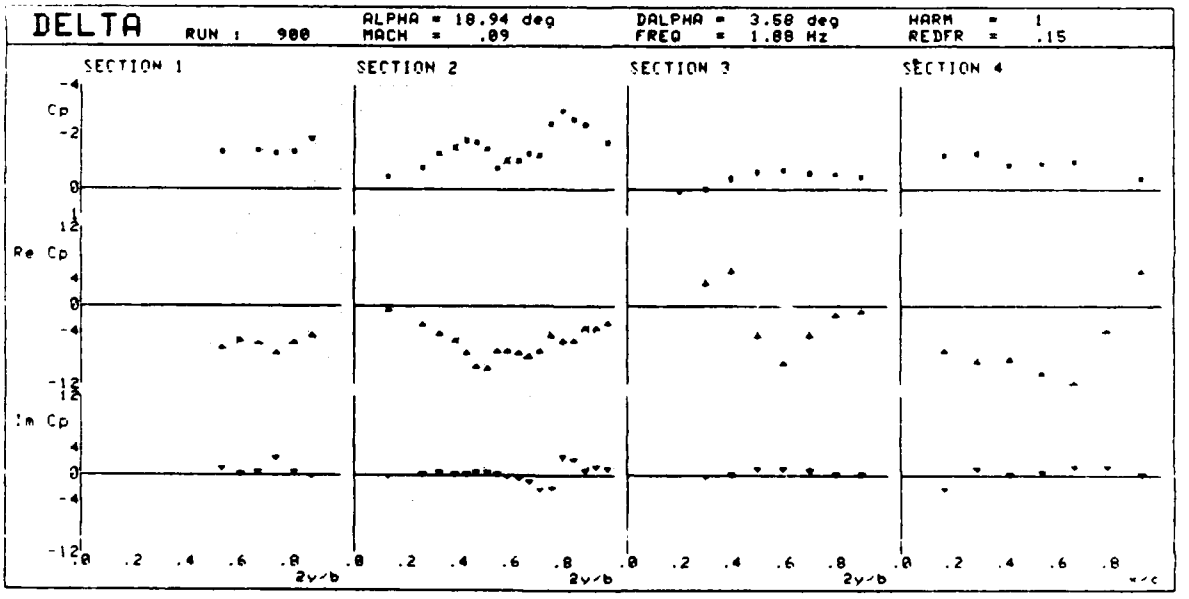

DELTA
RUN : 895
ALPHA = 22.42 deg
MACH = .89
DALPHA = 6.00 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

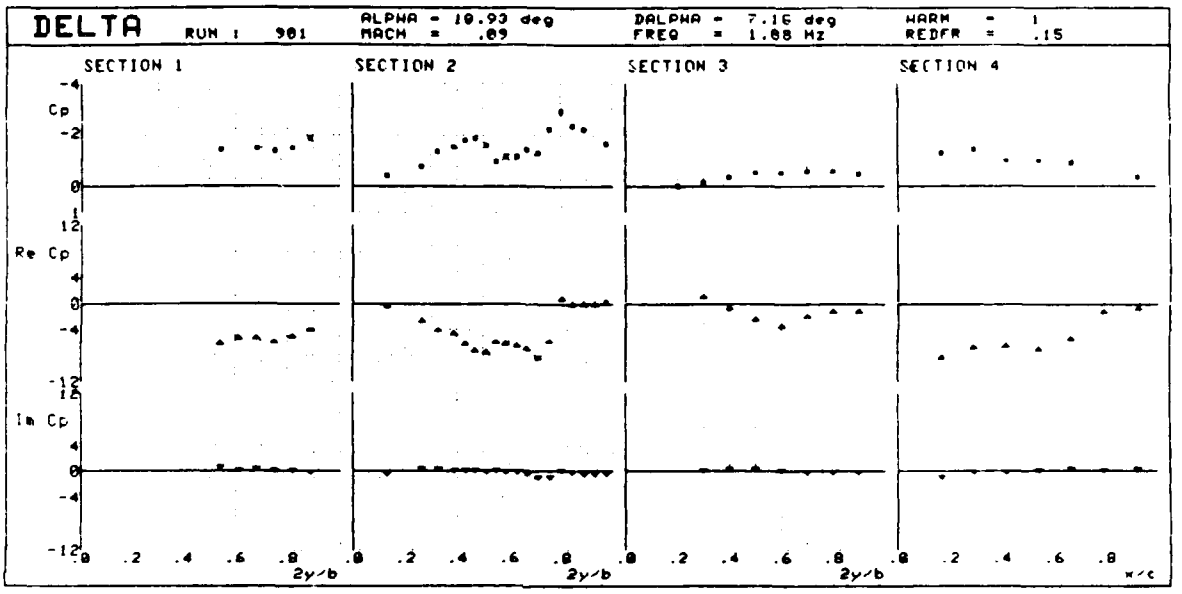

DELTA
RUN : 896
ALPHA = 22.46 deg
MACH = .89
DALPHA = 1.72 deg
FREQ = 12.00 Hz
HARM = 1
REDFR = .98
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

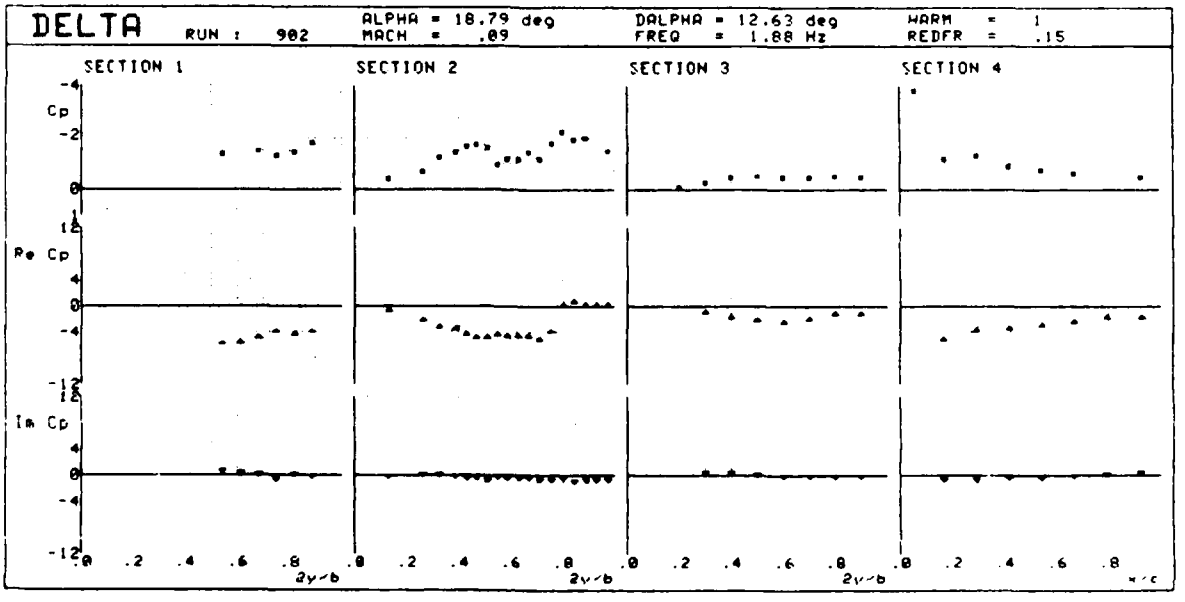

DELTA
RUN : 897
ALPHA = 10.96 deg
MACH = .09
DALPHA = 3.02 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

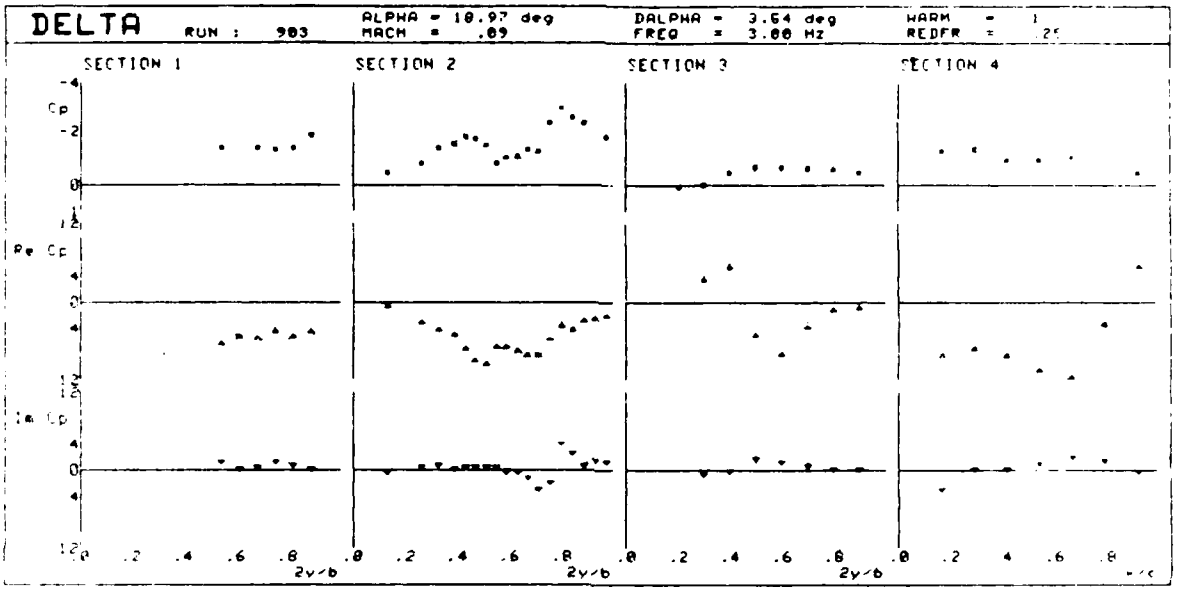

DELTA
RUN : 898
ALPHA = 10.92 deg
MACH = .09
DALPHA = 7.66 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

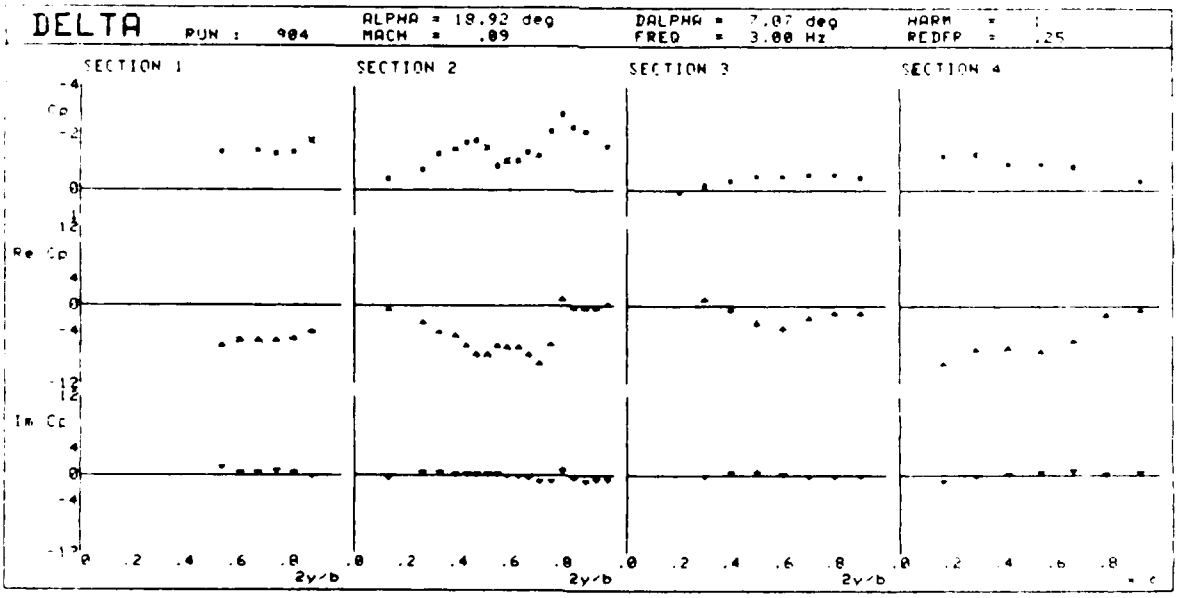

DELTA
RUN : 899
ALPHA = 10.70 deg
MACH = .09
DALPHA = 13.60 deg
FREQ = 1.13 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

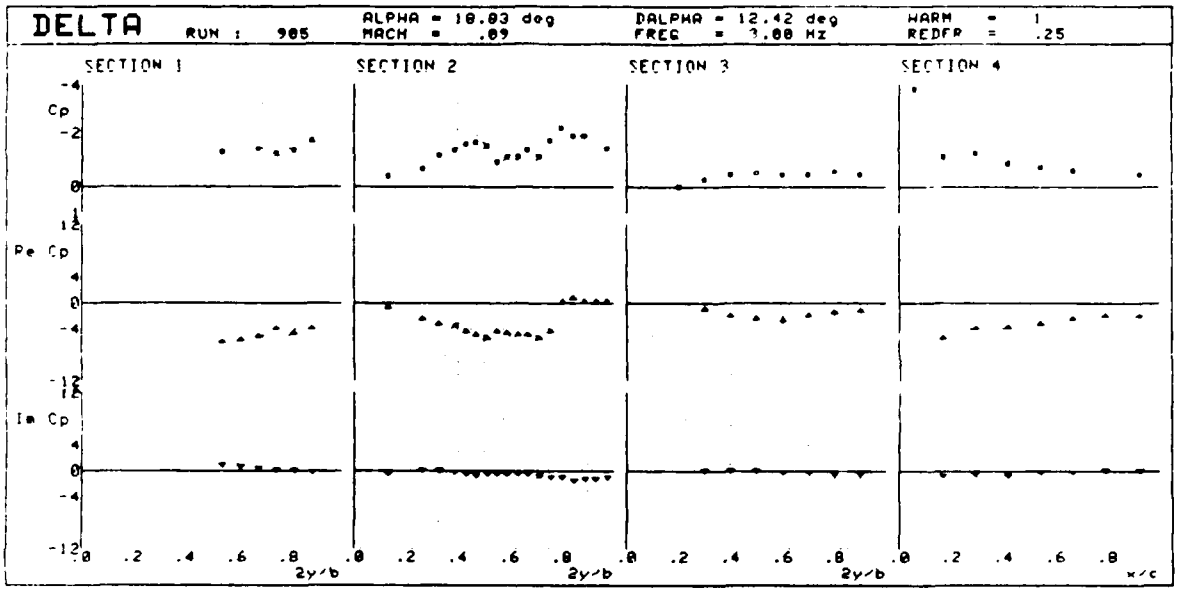

DELTA
RUN : 900
ALPHA = 10.94 deg
MACH = .09
DALPHA = 3.60 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

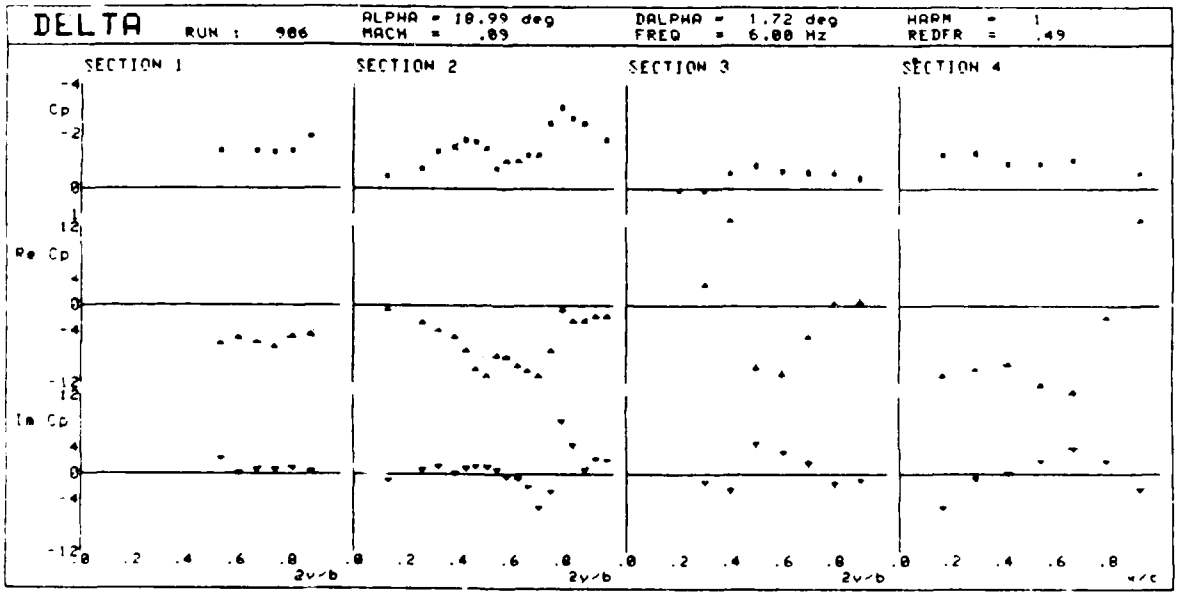

DELTA
RUN : 901
ALPHA = 10.93 deg
MACH = .89
DALPHA = 7.16 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

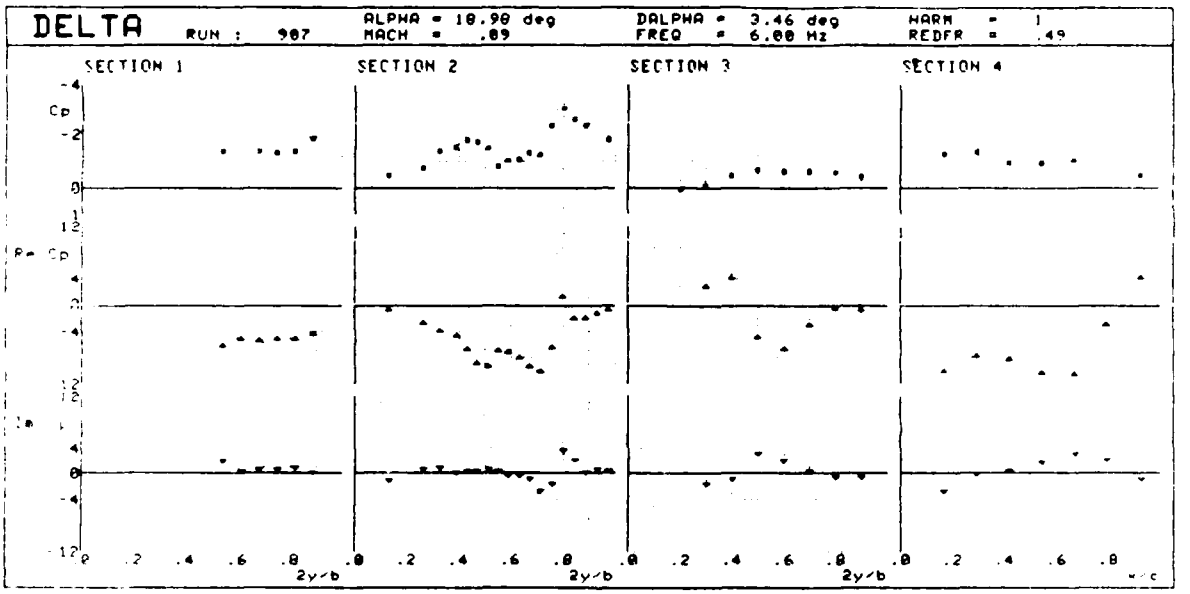

DELTA
RUN : 902
ALPHA = 18.79 deg
MACH = .89
DALPHA = 12.63 deg
FREQ = 1.88 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

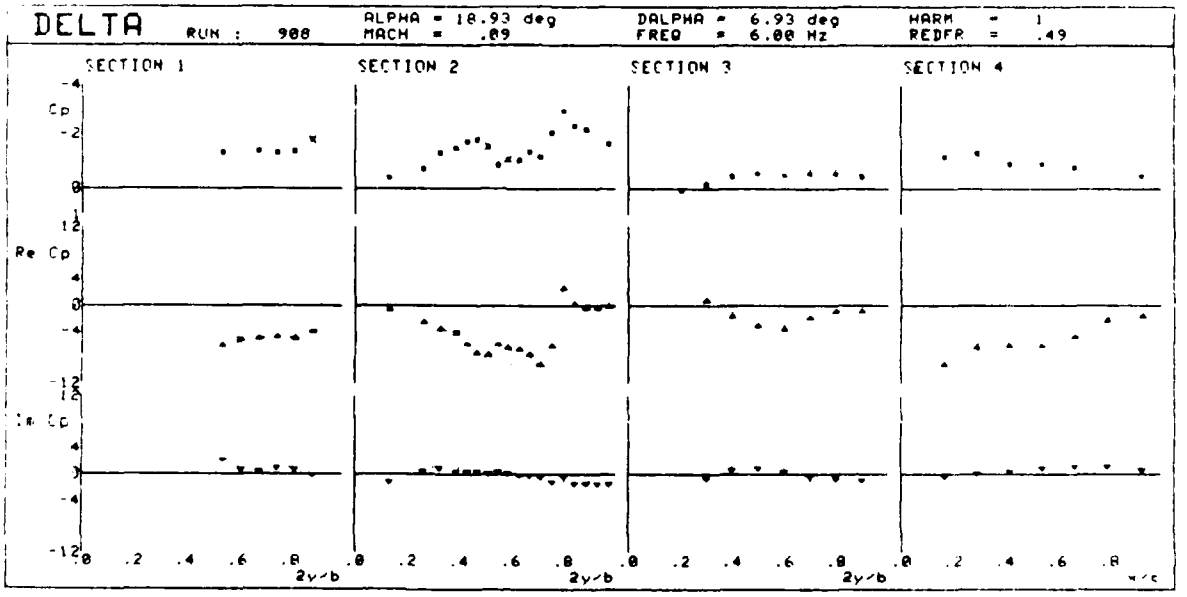

DELTA
RUN : 903
ALPHA = 18.97 deg
MACH = .69
DALPHA = 3.54 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

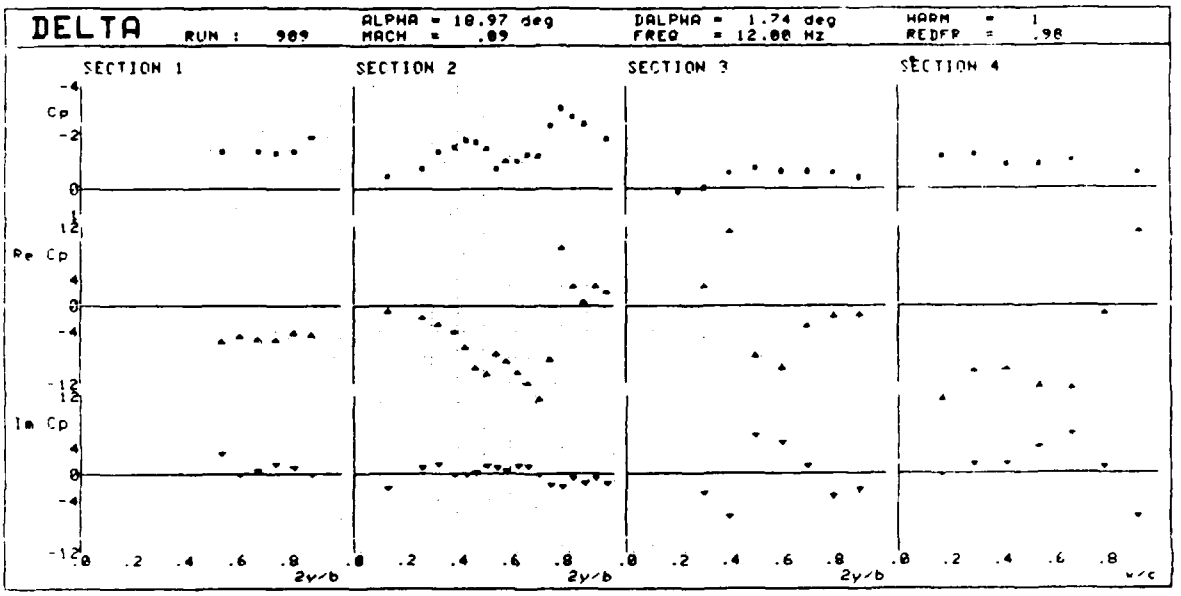

DELTA
RUN : 904
ALPHA = 18.92 deg
MACH = .69
DALPHA = 7.07 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

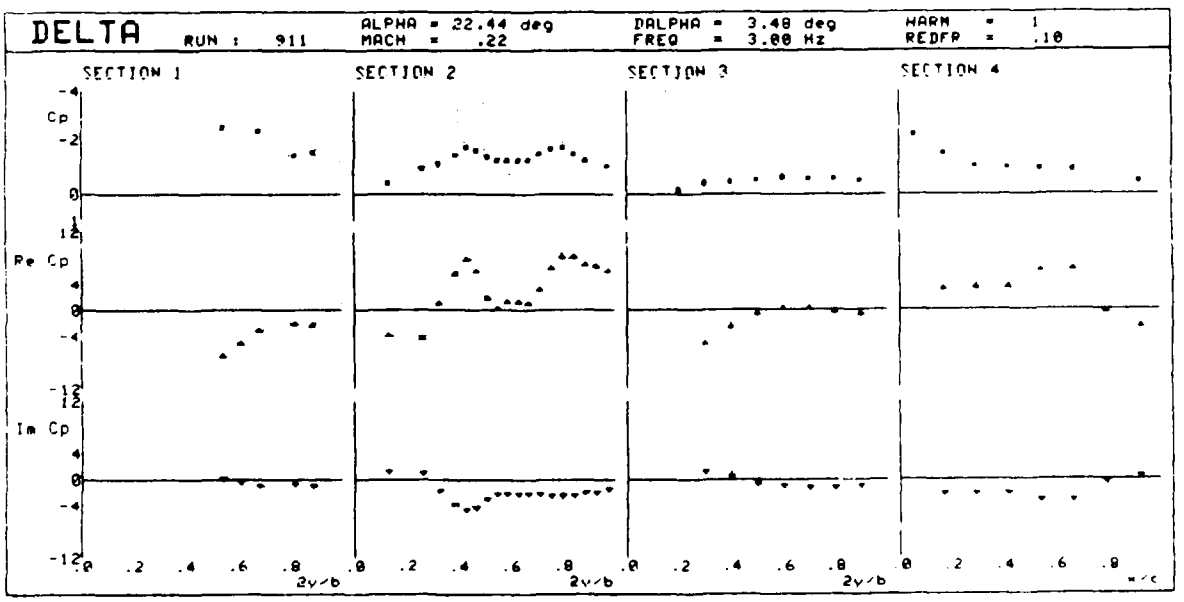

DELTA
RUN : 985
ALPHA = 10.03 deg
MACH = .89
DALPHA = 12.42 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

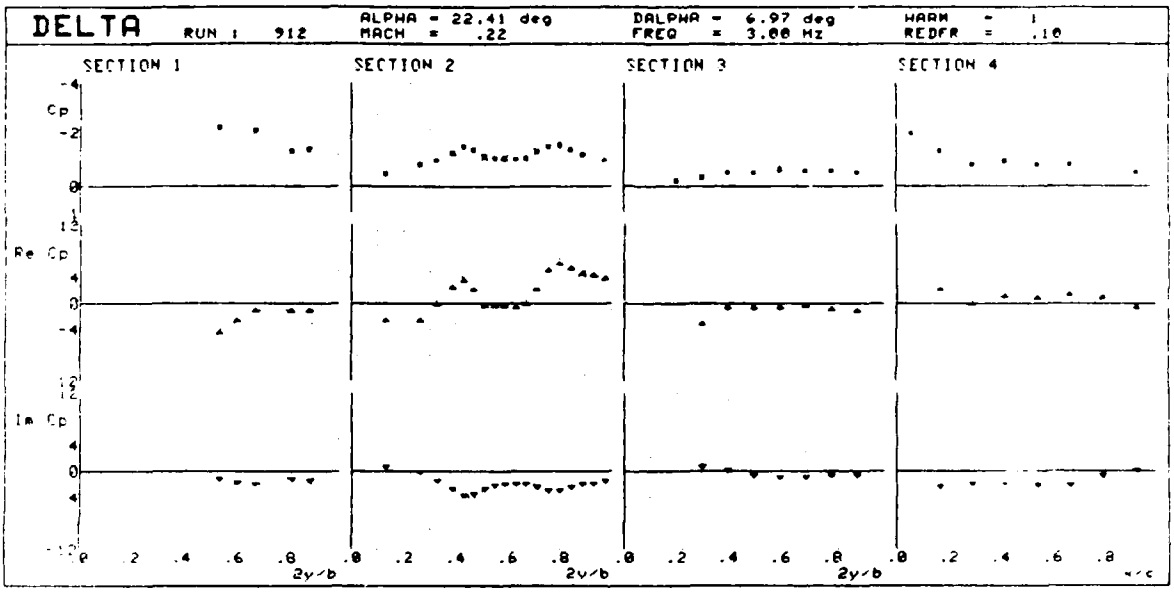

DELTA
RUN : 986
ALPHA = 10.99 deg
MACH = .89
DALPHA = 1.72 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

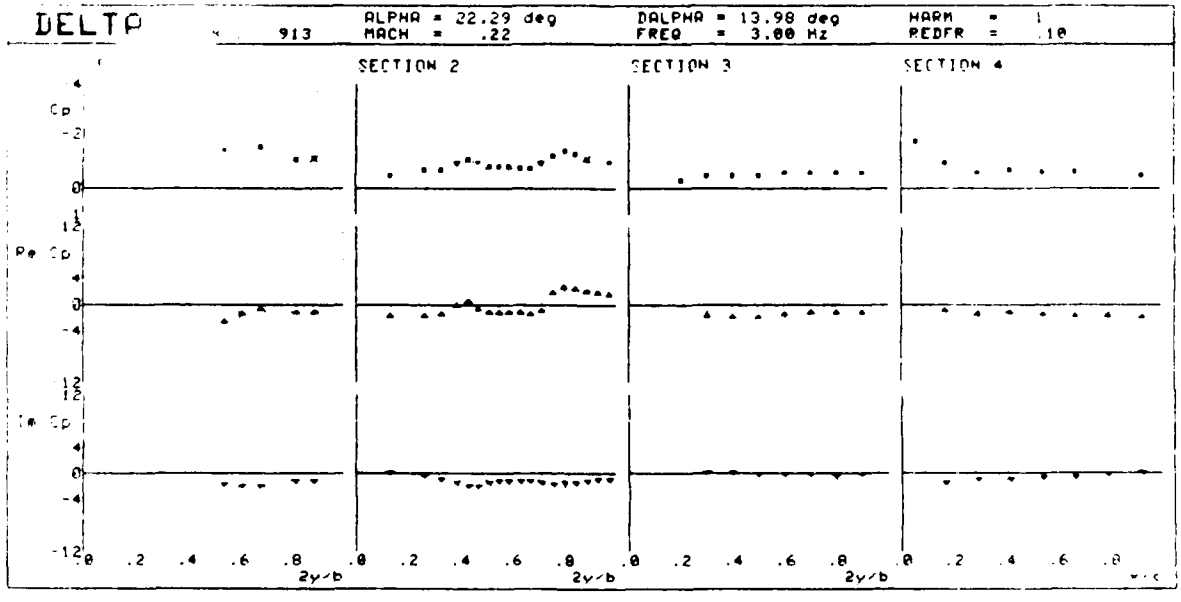

DELTA
RUN : 907
ALPHA = 10.90 deg
MACH = .89
DALPHA = 3.46 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

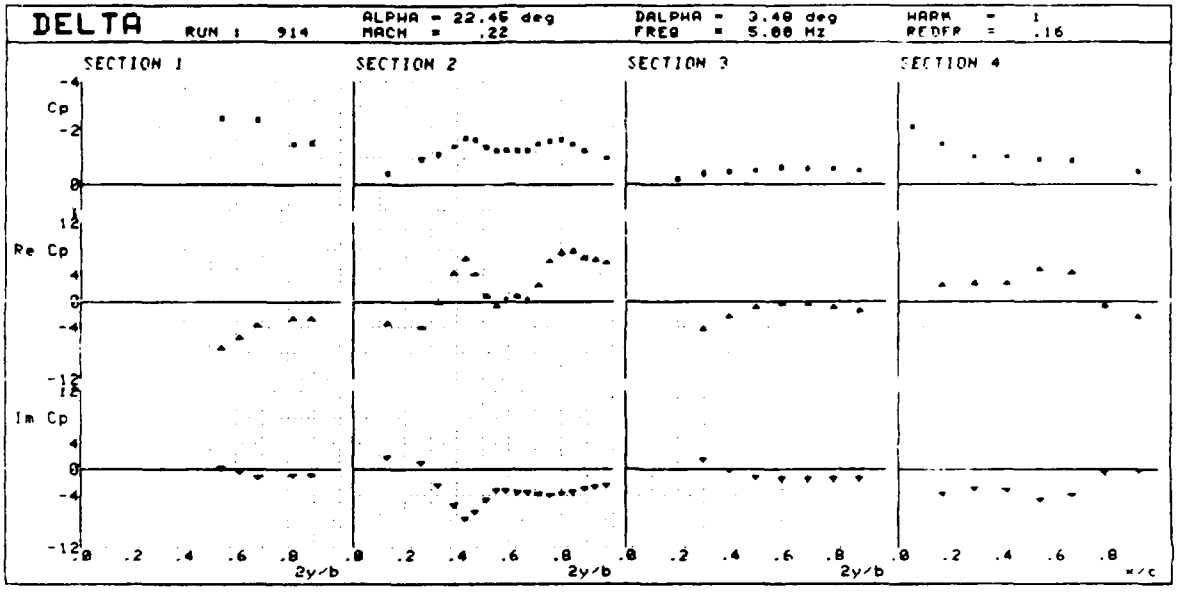

DELTA
RUN : 908
ALPHA = 10.93 deg
MACH = .89
DALPHA = 6.93 deg
FREQ = 6.00 Hz
HARM = 1
REDFR = .49
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

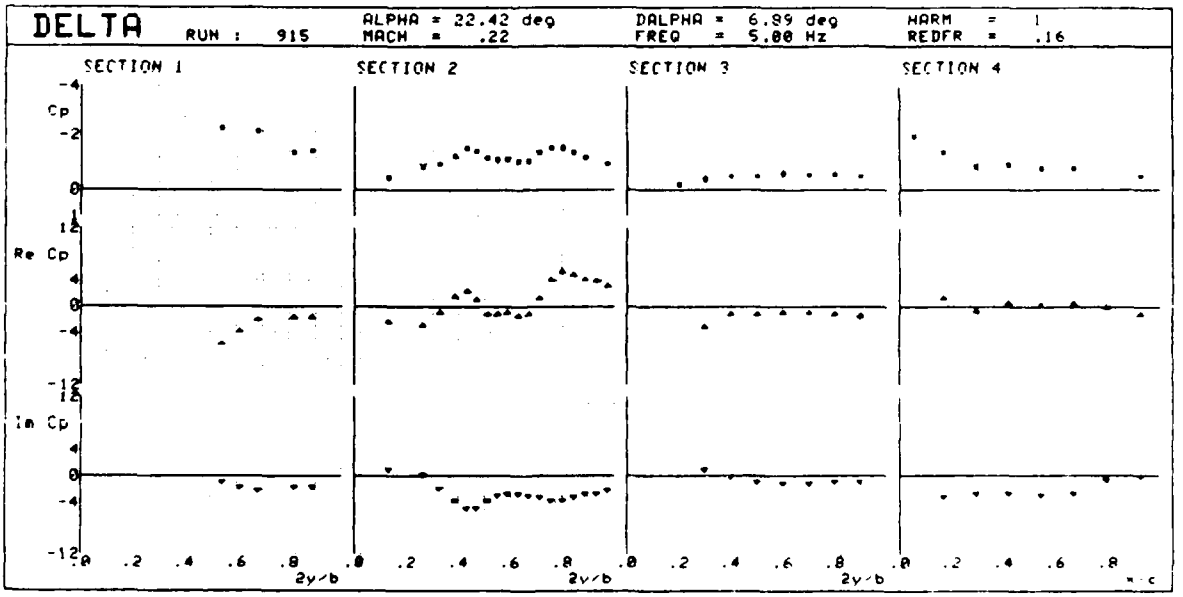

DELTA
RUN : 909
ALPHA = 10.97 deg
MACH = .09
DALPHA = 1.74 deg
FREQ = 12.00 Hz
HARM = 1
REDFR = .98
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

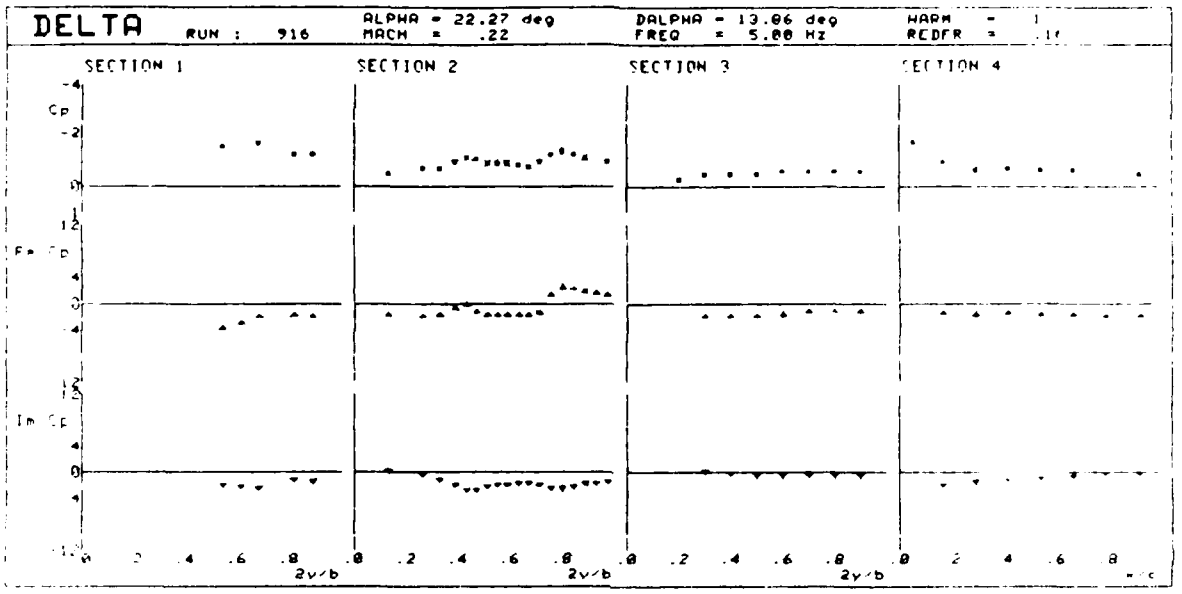

DELTA
RUN : 911
ALPHA = 22.44 deg
MACH = .22
DALPHA = 3.48 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .10
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

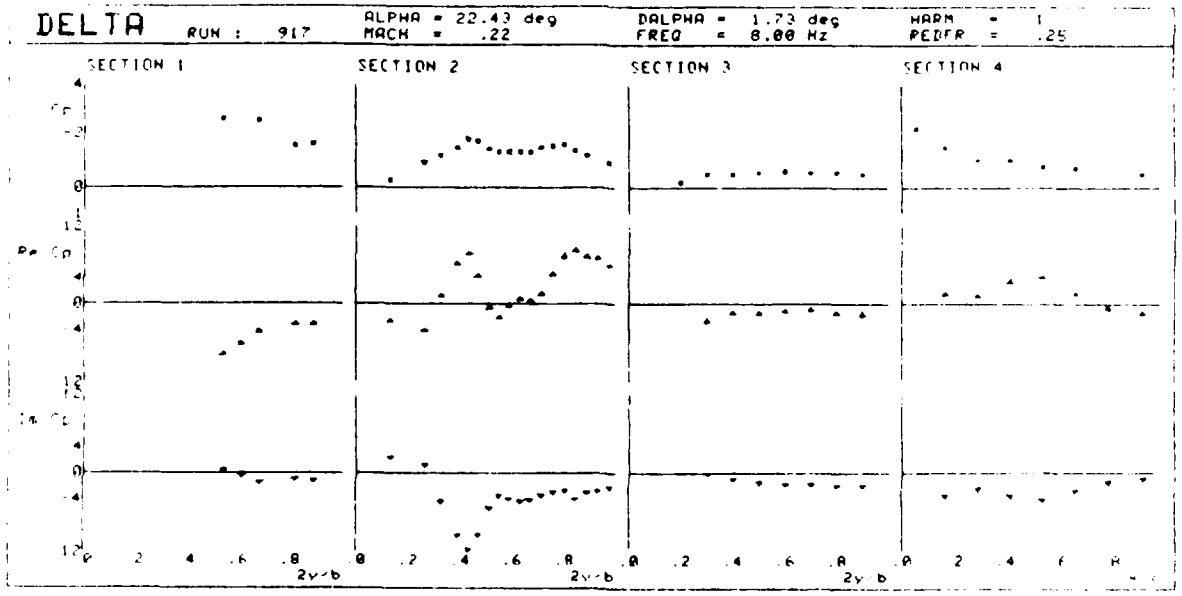

DELTA
RUN 1 912
ALPHA = 22.41 deg
MACH = .22
DALPHA = 6.97 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .10
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

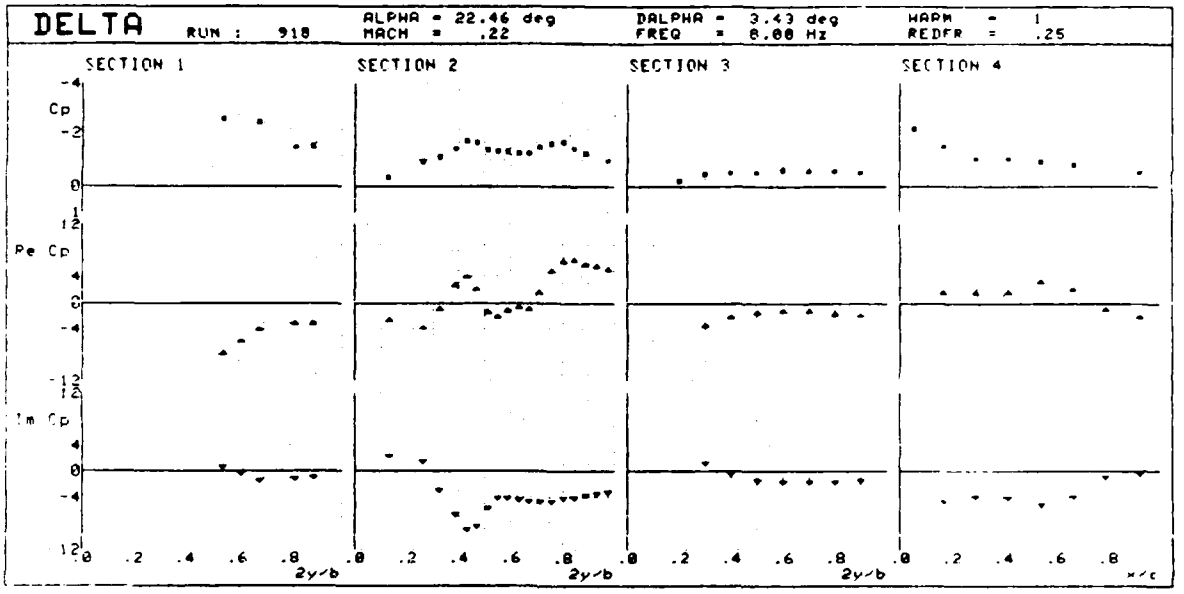

DELTP
913
ALPHA = 22.29 deg
MACH = .22
DALPHA = 13.98 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .10
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

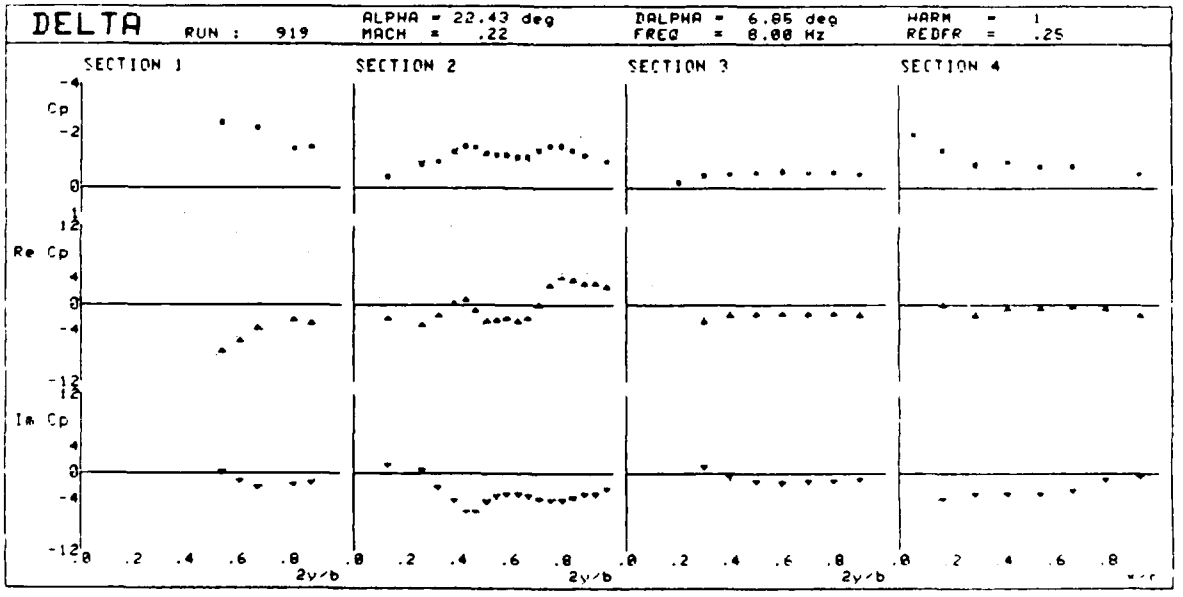

DELTA
RUN : 914
ALPHA = 22.46 deg
MACH = .22
DALPHA = 3.49 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

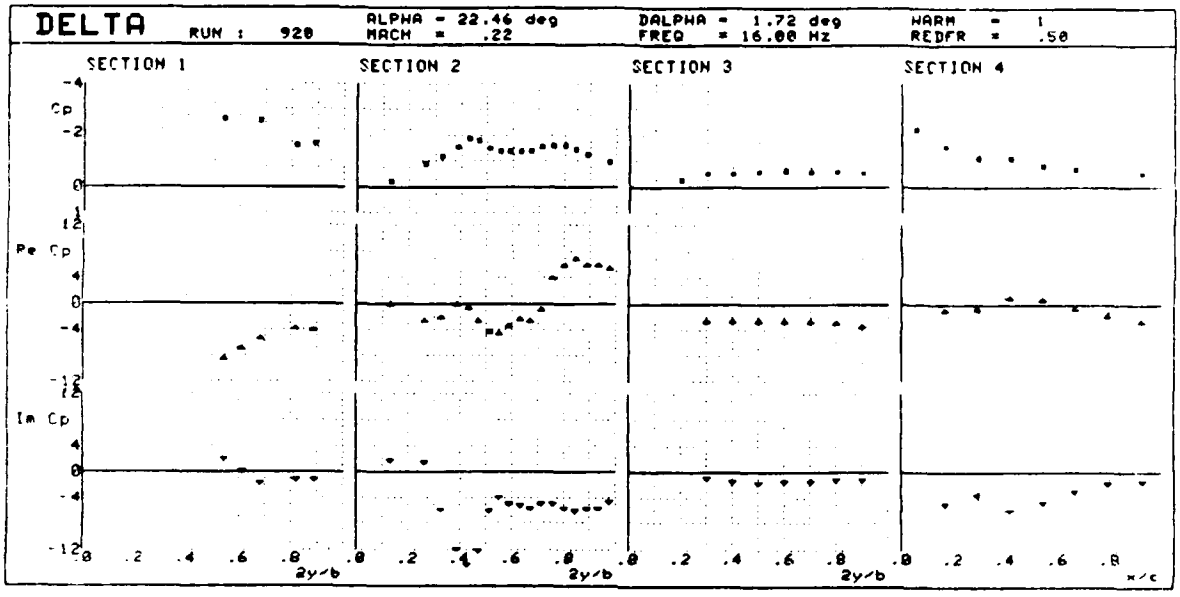

DELTA
RUN : 915
ALPHA = 22.42 deg
MACH = .22
DALPHA = 6.89 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

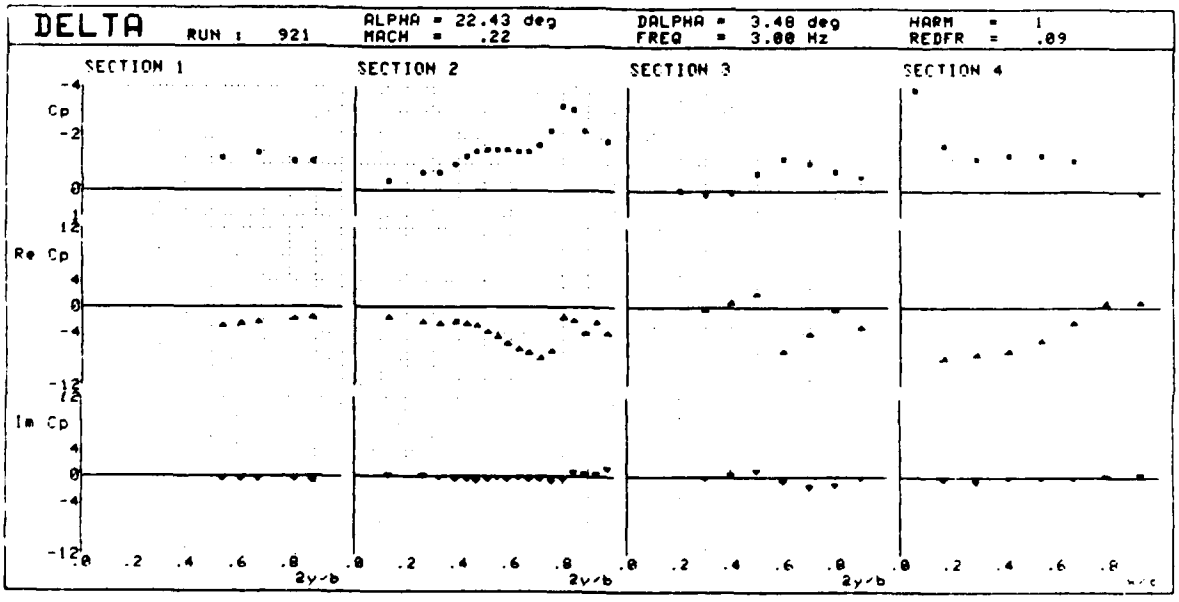

DELTA
RUN : 916
ALPHA = 22.27 deg
MACH = .22
DALPHA = 13.06 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

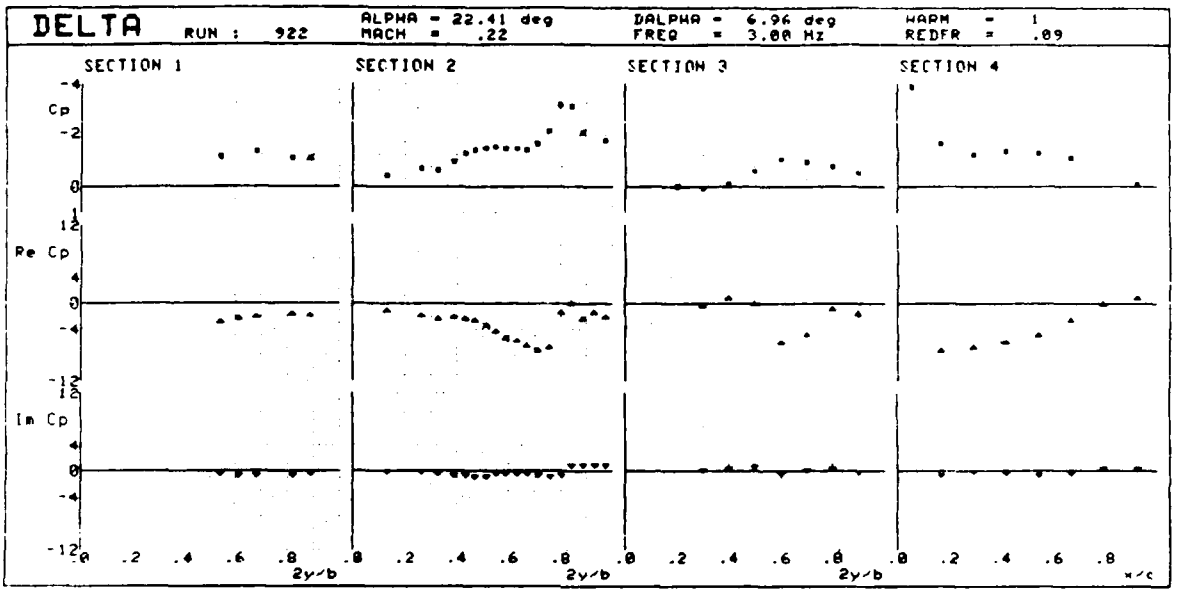

DELTA
RUN : 917
ALPHA = 22.43 deg
MACH = .22
DALPHA = 1.73 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

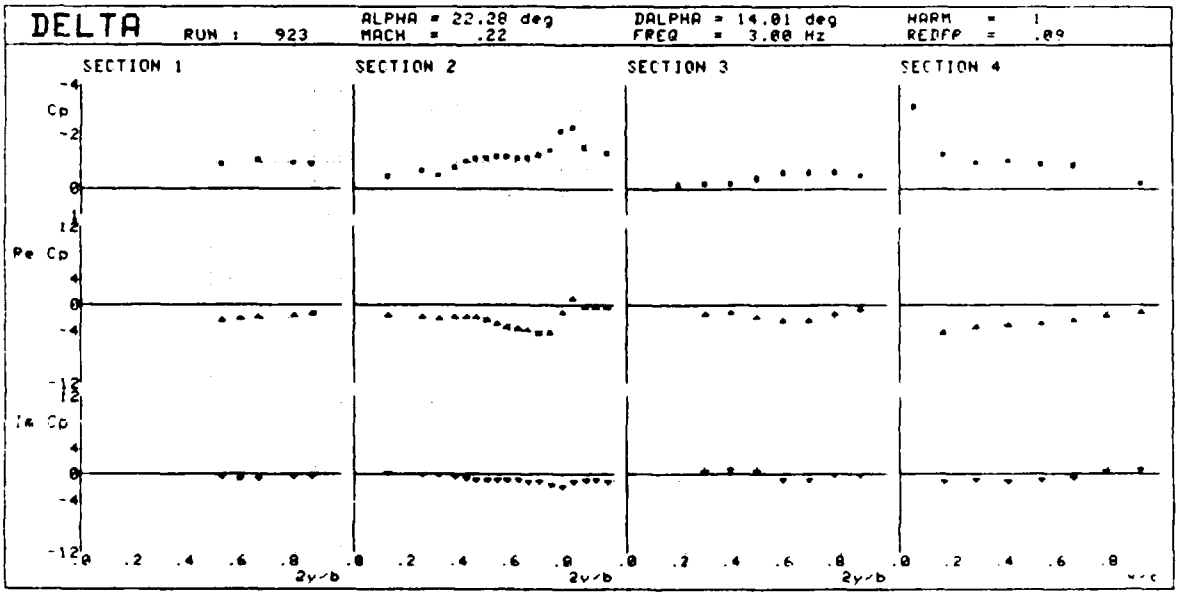

DELTA
RUN : 918
ALPHA = 22.46 deg
MACH = .22
DALPHA = 3.43 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

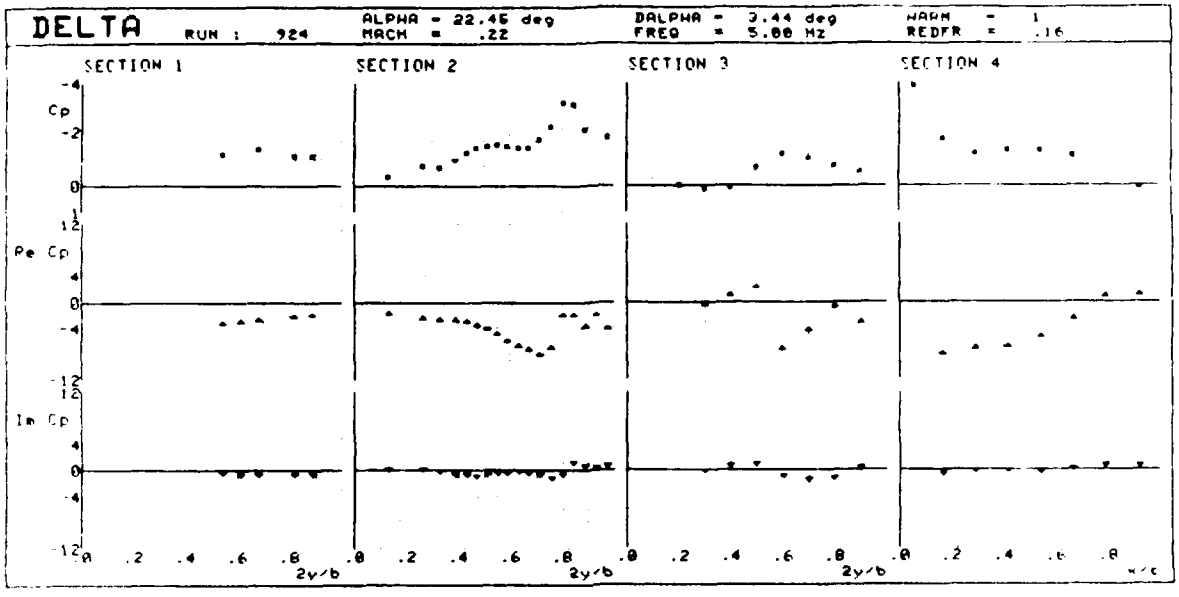

DELTA
RUN : 919
ALPHA = 22.43 deg
MACH = .22
DALPHA = 6.85 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

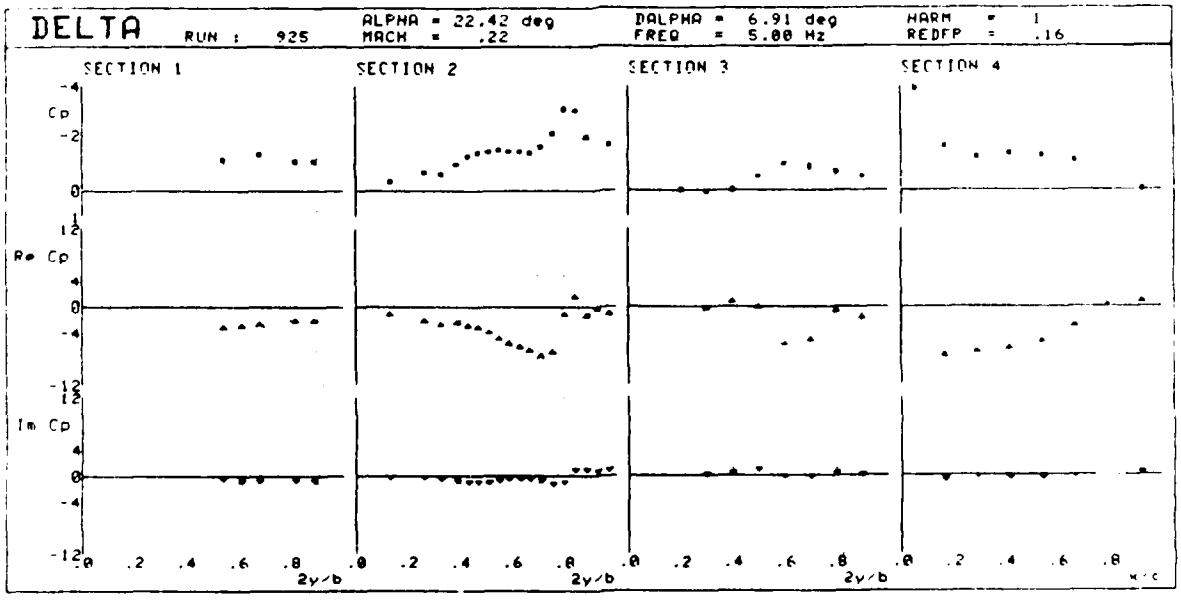

DELTA
RUN : 920
ALPHA = 22.46 deg
MACH = .22
DALPHA = 1.72 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

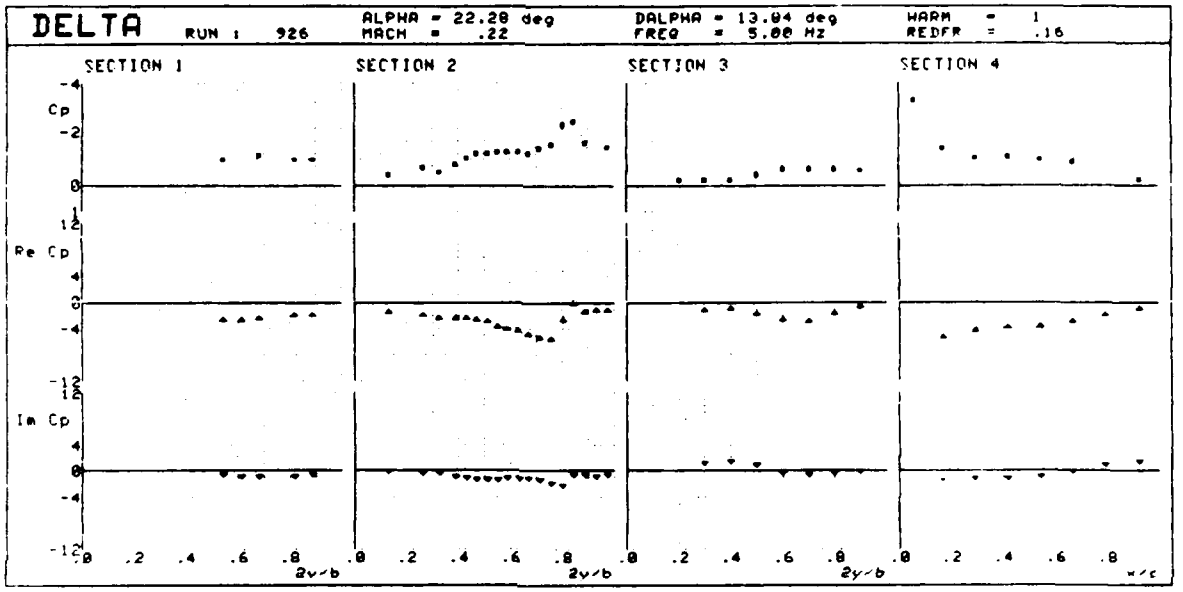

DELTA
RUN : 921
ALPHA = 22.43 deg
MACH = .22
DALPHA = 3.48 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

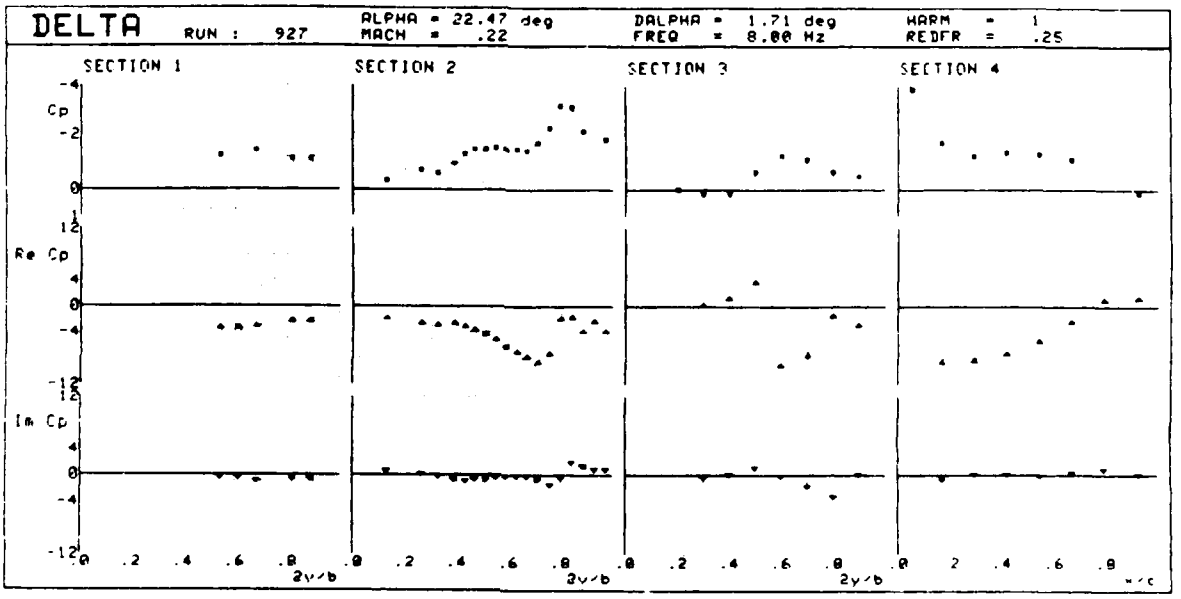

DELTA
RUN : 922
ALPHA = 22.41 deg
MACH = .22
DALPHA = 6.96 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

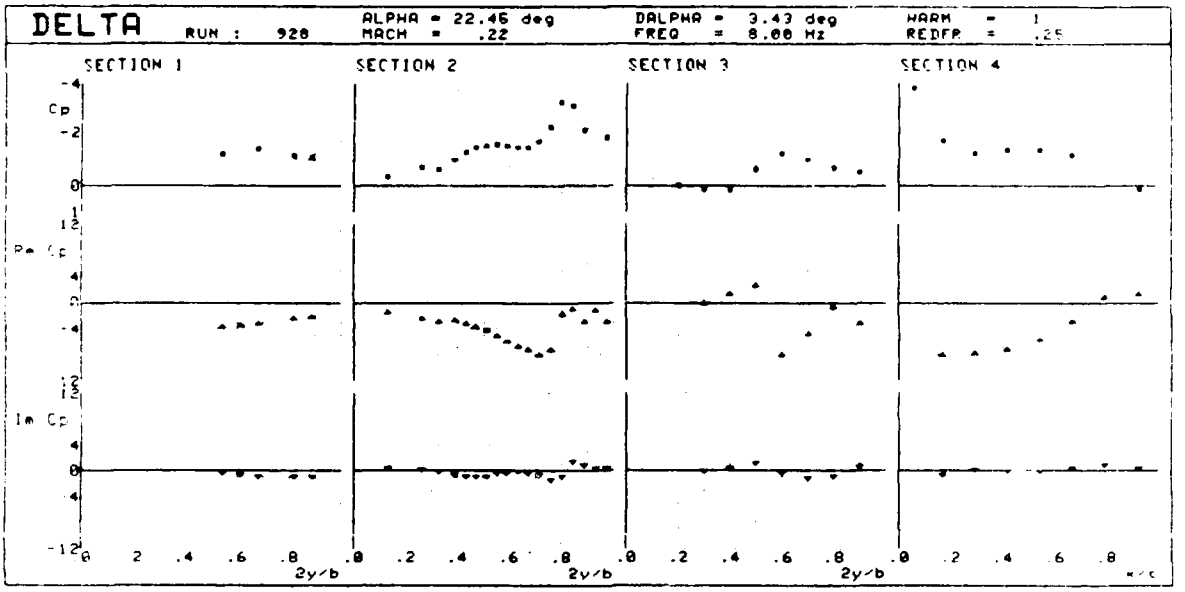

DELTA
RUN : 923
ALPHA = 22.28 deg
MACH = .22
DALPHA = 14.01 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

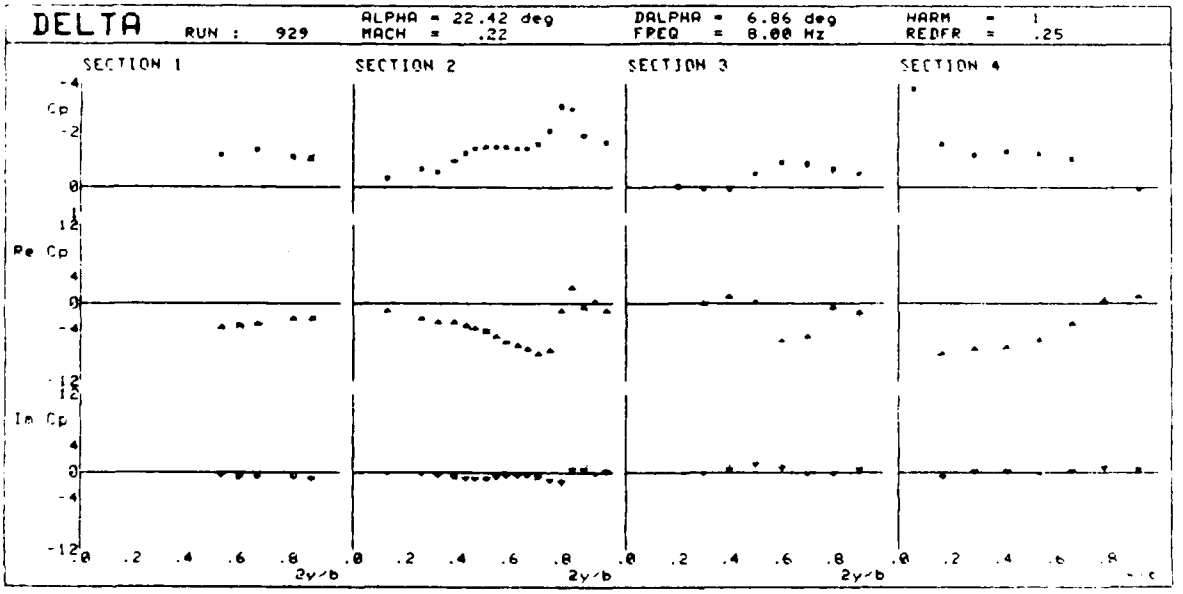

DELTA
RUN : 924
ALPHA = 22.45 deg
MACH = .22
DALPHA = 3.44 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

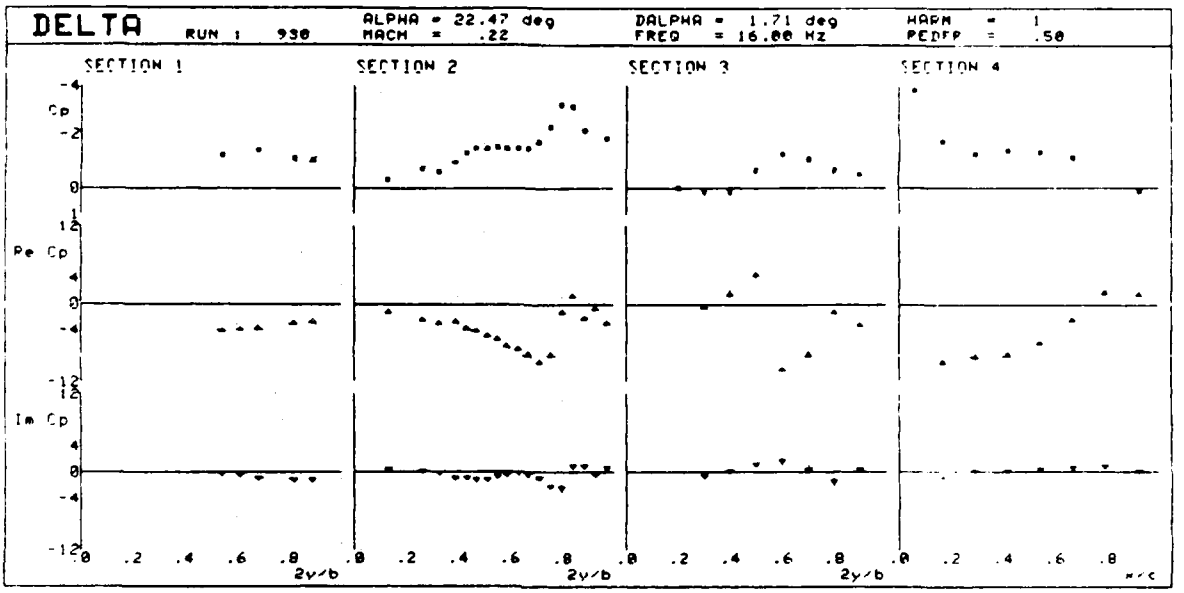

DELTA
RUN : 925
ALPHA = 22.42 deg
MACH = .22
DALPHA = 6.91 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

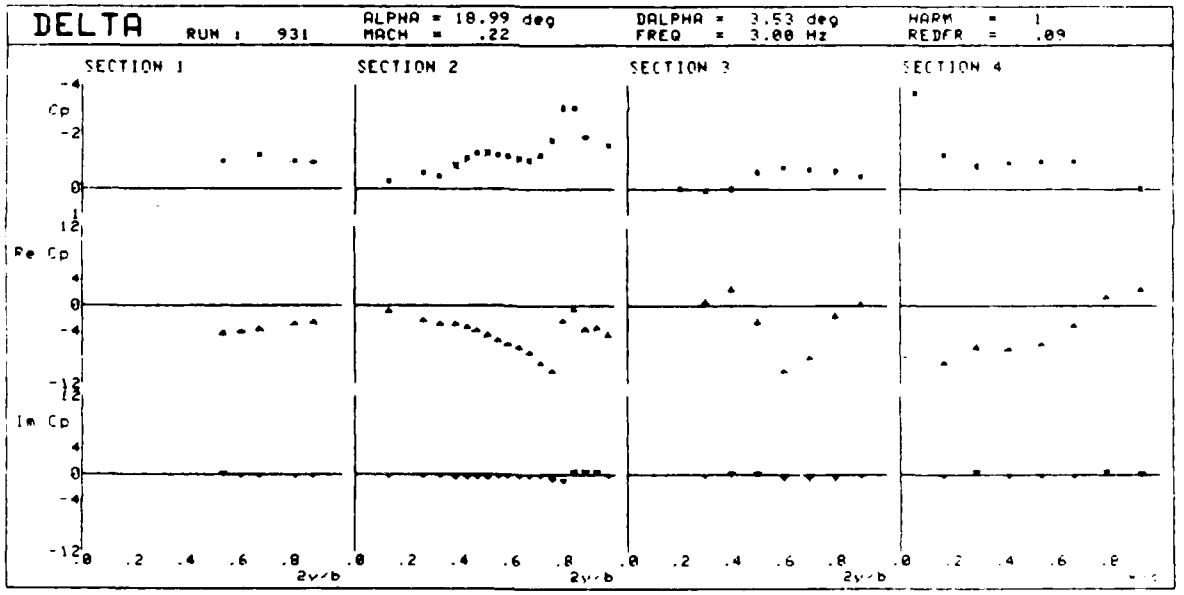

DELTA
RUN : 926
ALPHA = 22.28 deg
MACH = .22
DALPHA = 13.04 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

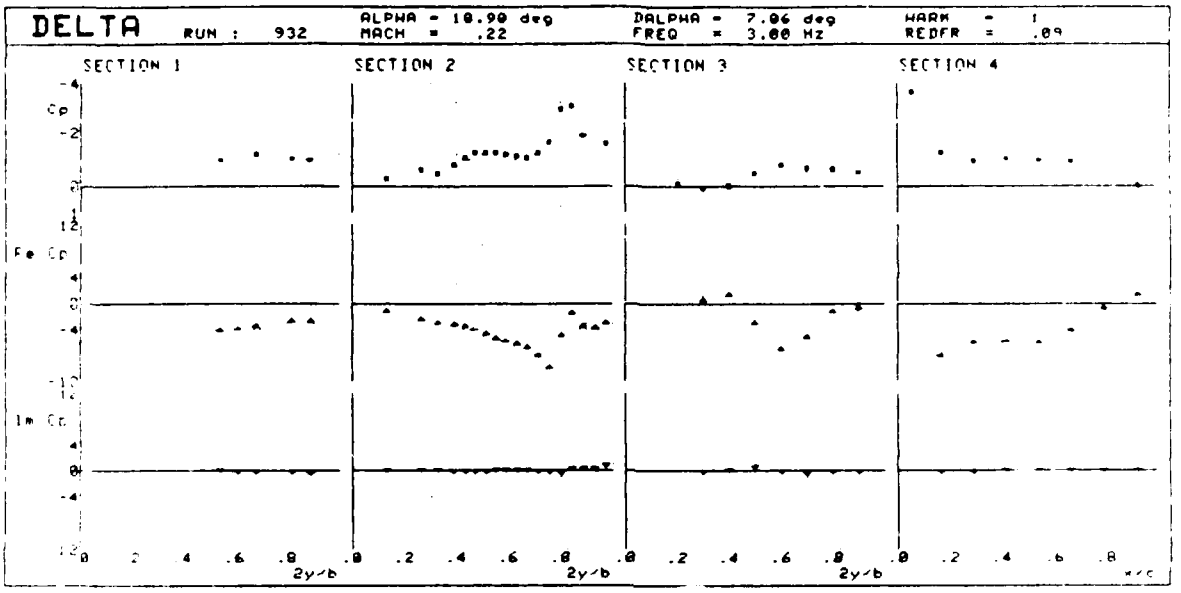

DELTA
RUN : 927
ALPHA = 22.47 deg
MACH = .22
DALPHA = 1.71 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

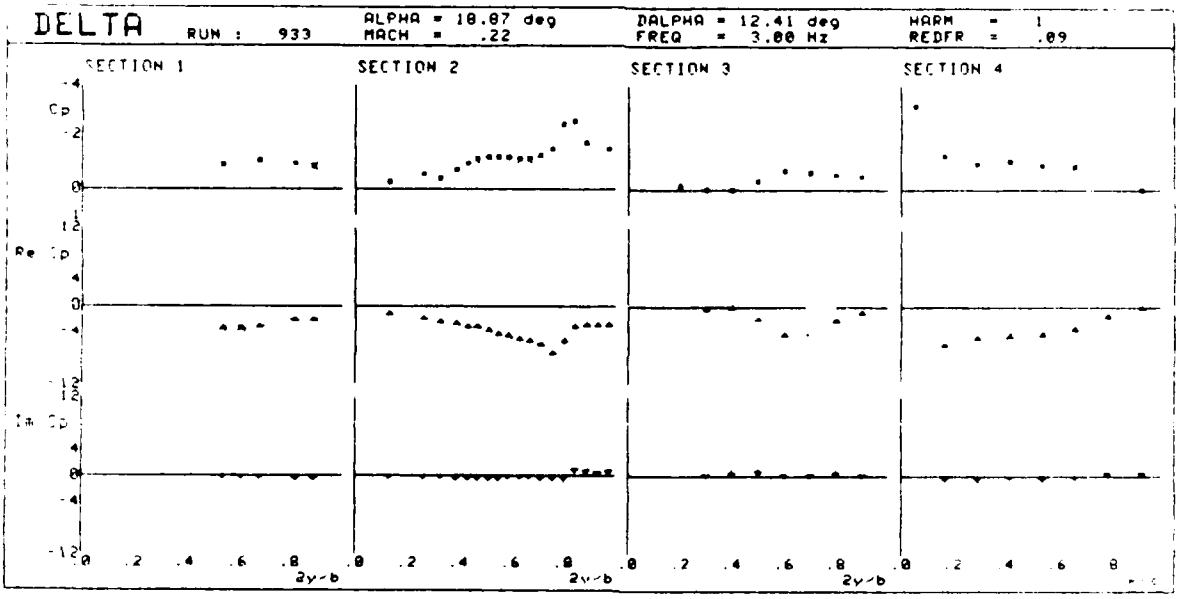

DELTA
RUN : 928
ALPHA = 22.46 deg
MACH = .22
DALPHA = 3.43 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

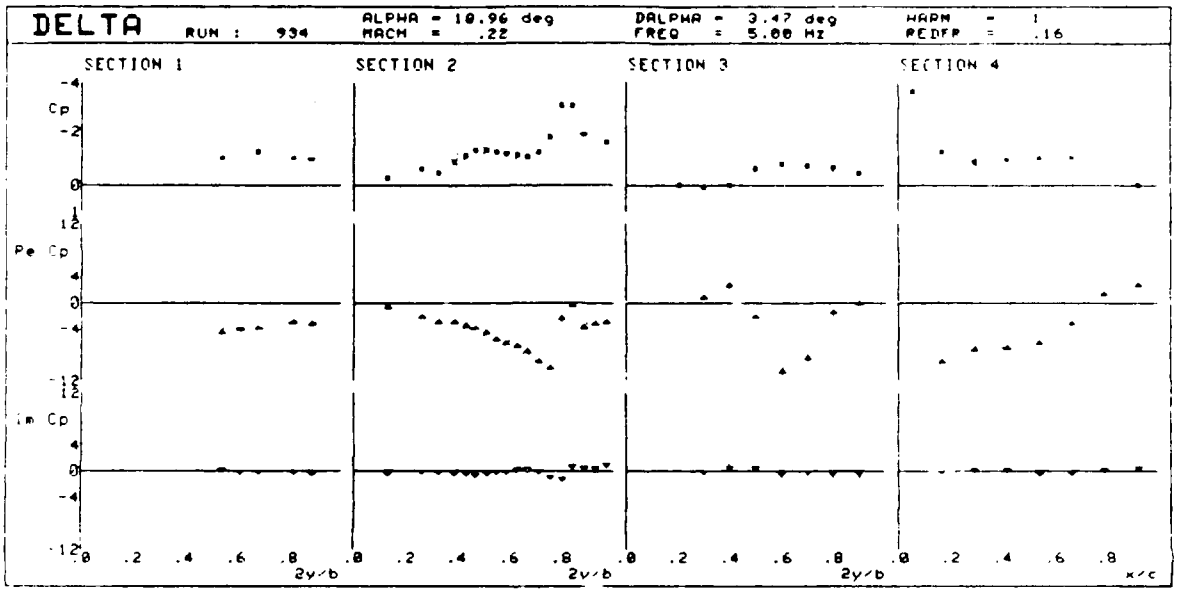

DELTA
RUN : 929
ALPHA = 22.42 deg
MACH = .22
DALPHA = 6.86 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

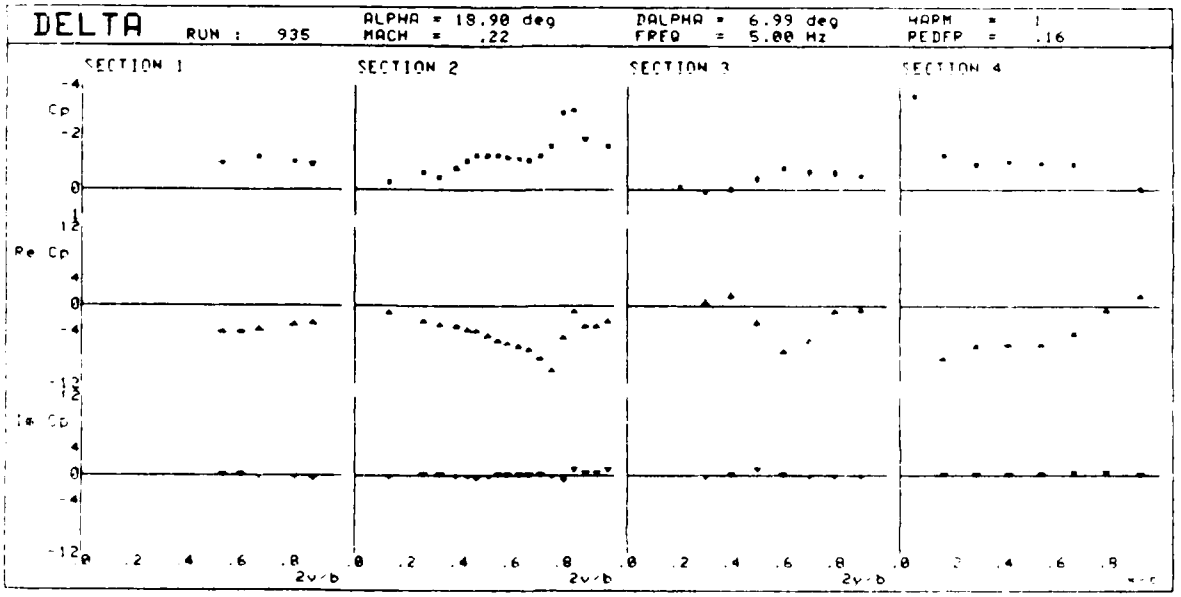

DELTA
RUN : 930
ALPHA = 22.47 deg
MACH = .22
DALPHA = 1.71 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

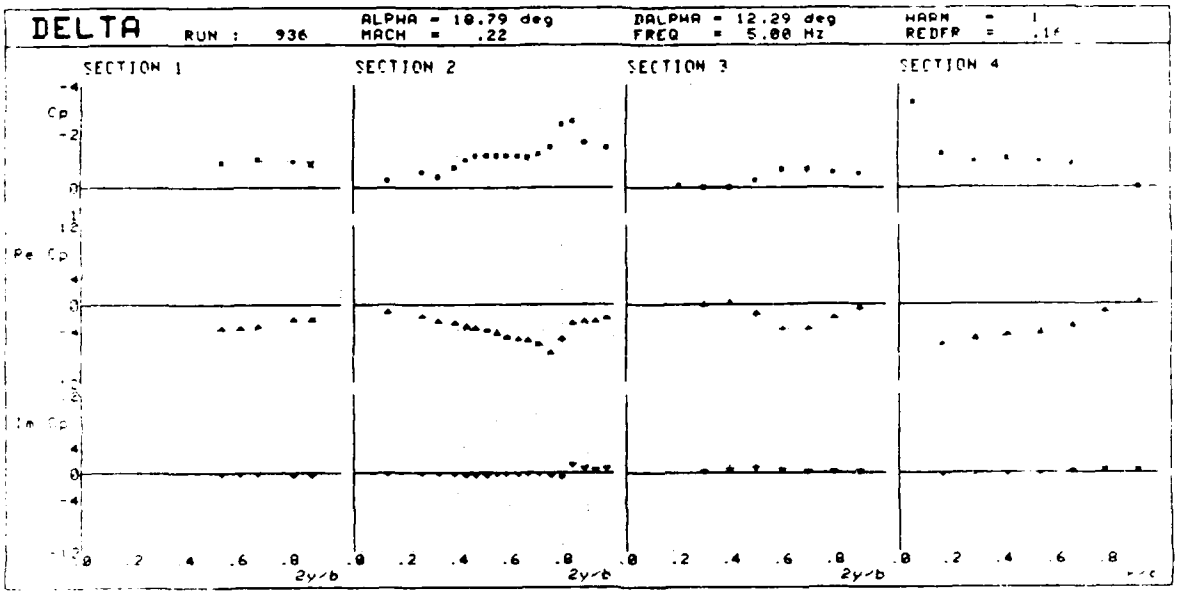

DELTA
RUN : 931
ALPHA = 18.99 deg
MACH = .22
DALPHA = 3.53 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

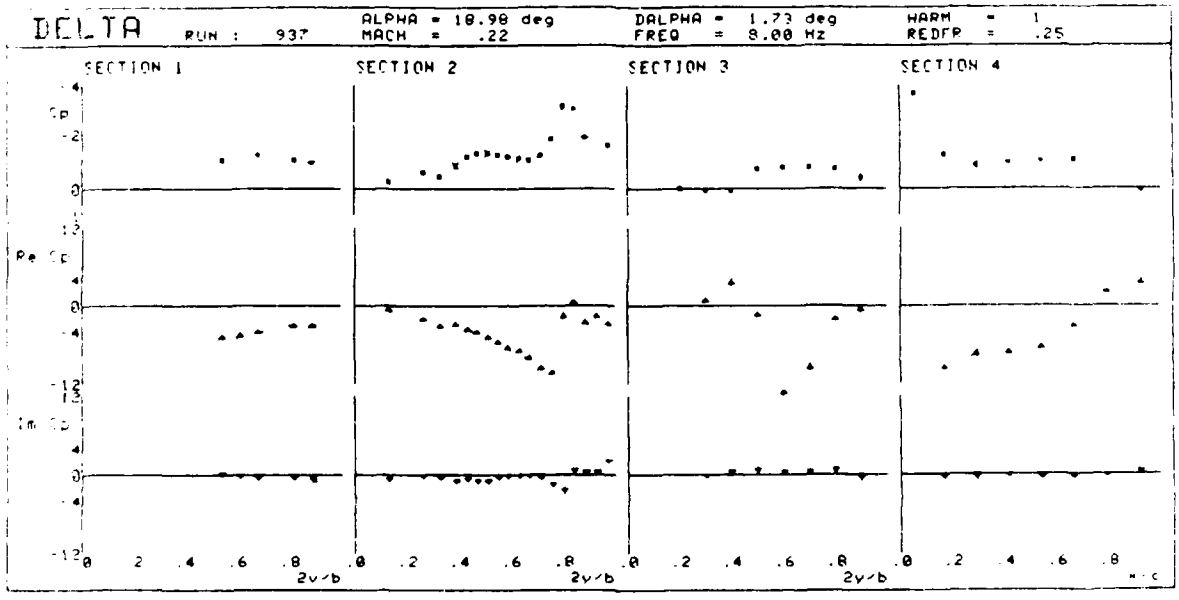

DELTA
RUN : 932
ALPHA = 10.90 deg
MACH = .22
DALPHA = 7.06 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

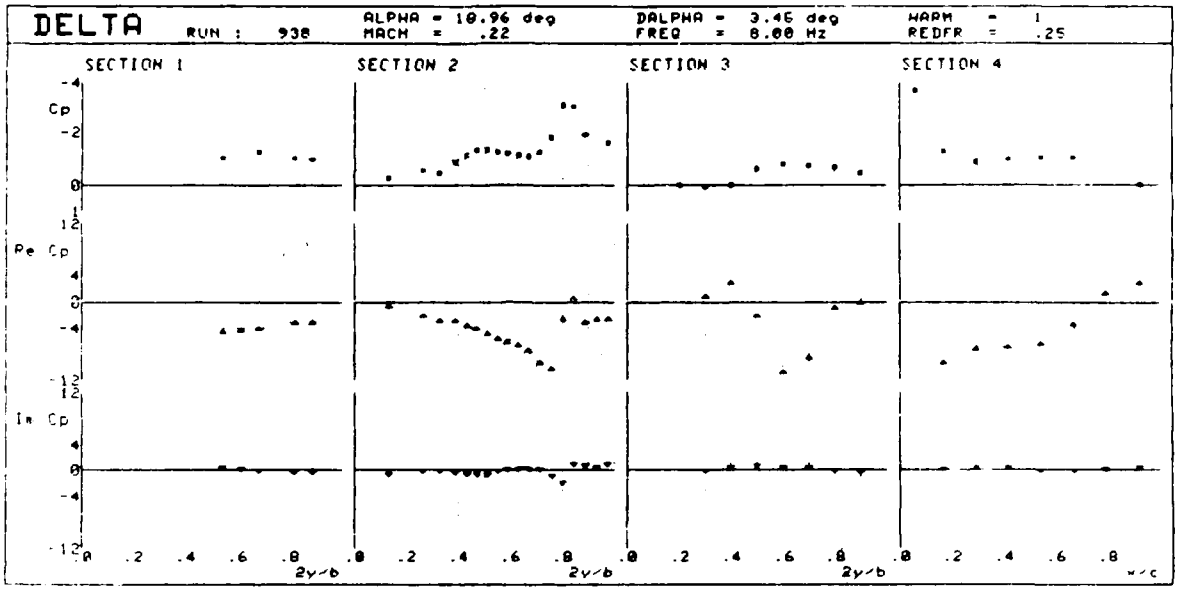

DELTA
RUN : 933
ALPHA = 10.87 deg
MACH = .22
DALPHA = 12.41 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

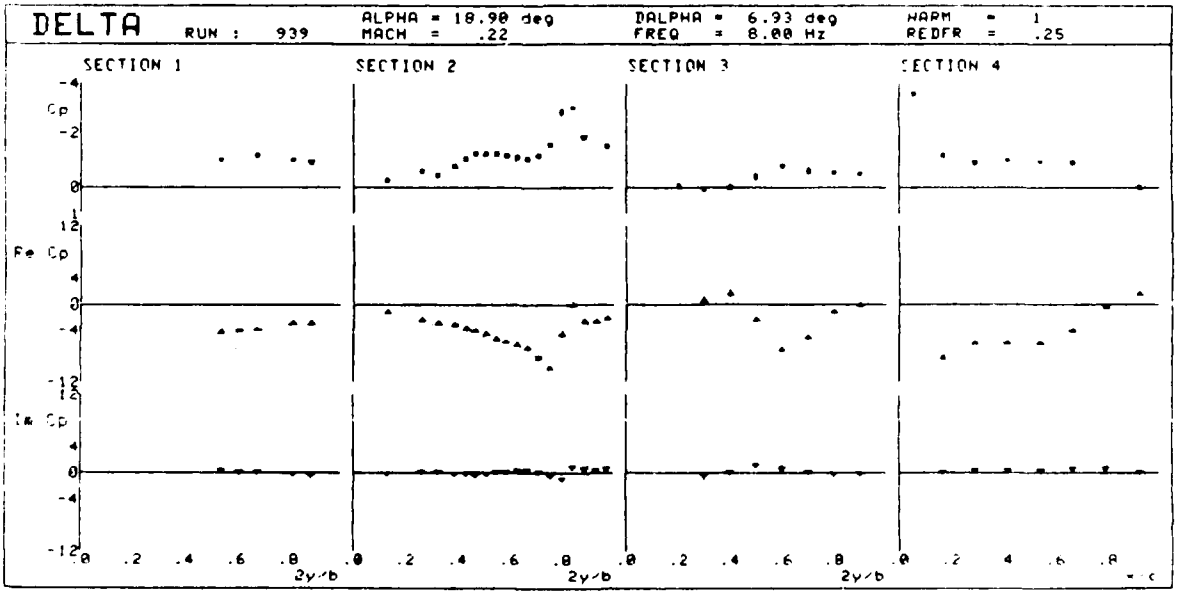

DELTA
RUN : 934
ALPHA = 10.96 deg
MACH = .22
DALPHA = 3.47 deg
FREQ = 5.00 Hz
HARM = 1
REDFP = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

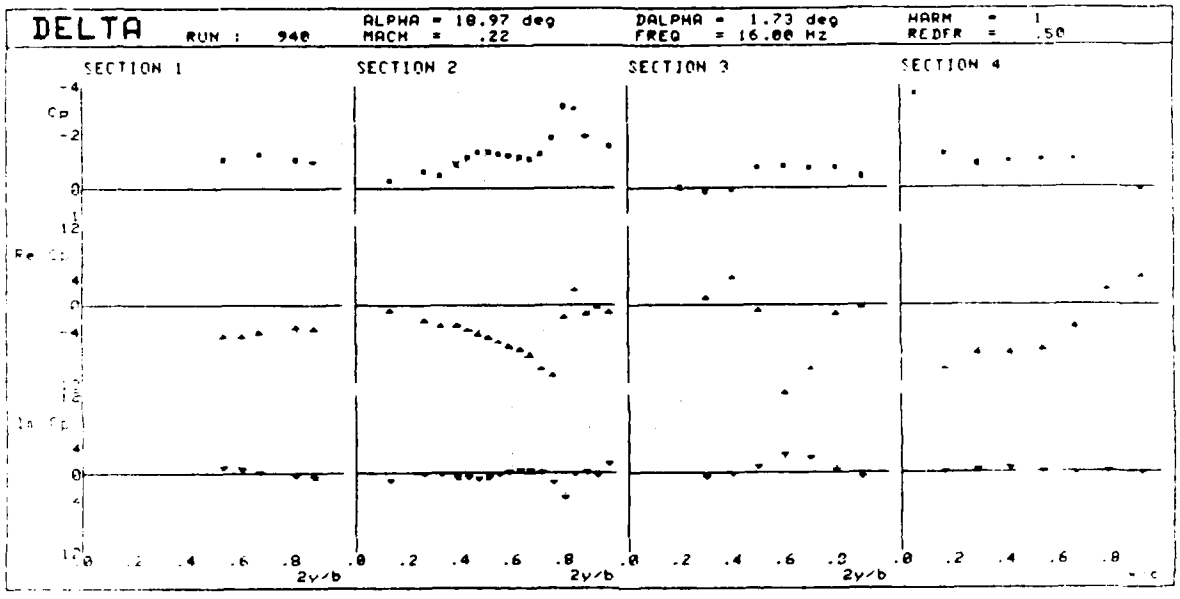

DELTA
RUN : 935
ALPHA = 18.90 deg
MACH = .22
DALPHA = 6.99 deg
FREQ = 5.00 Hz
HARM = 1
REDFP = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

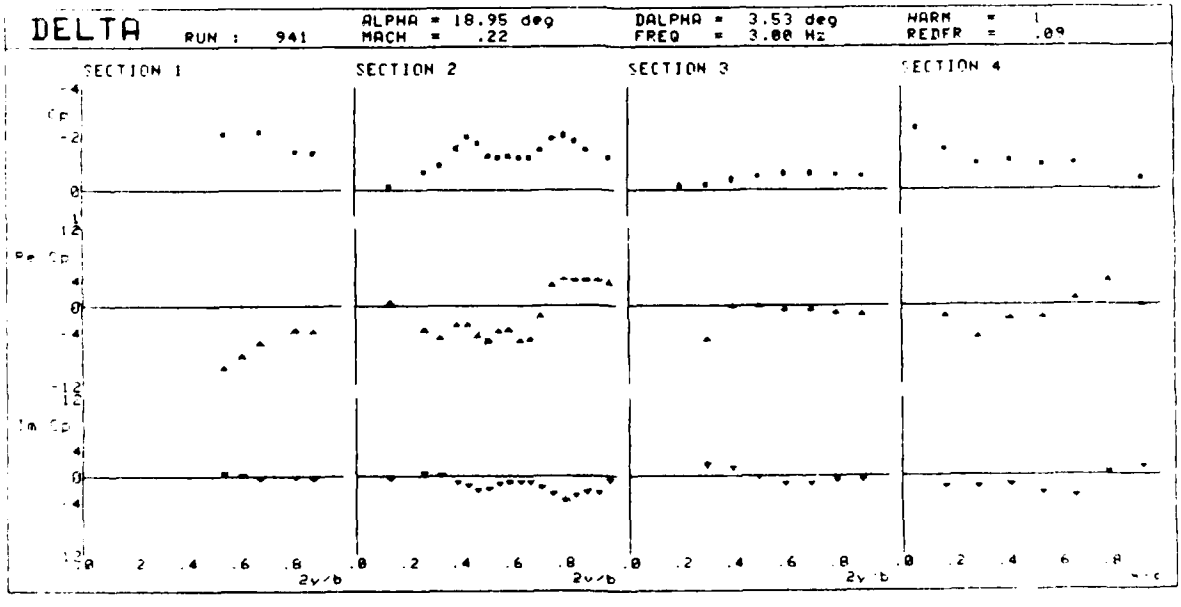

DELTA
RUN : 936
ALPHA = 10.79 deg
MACH = .22
DALPHA = 12.29 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

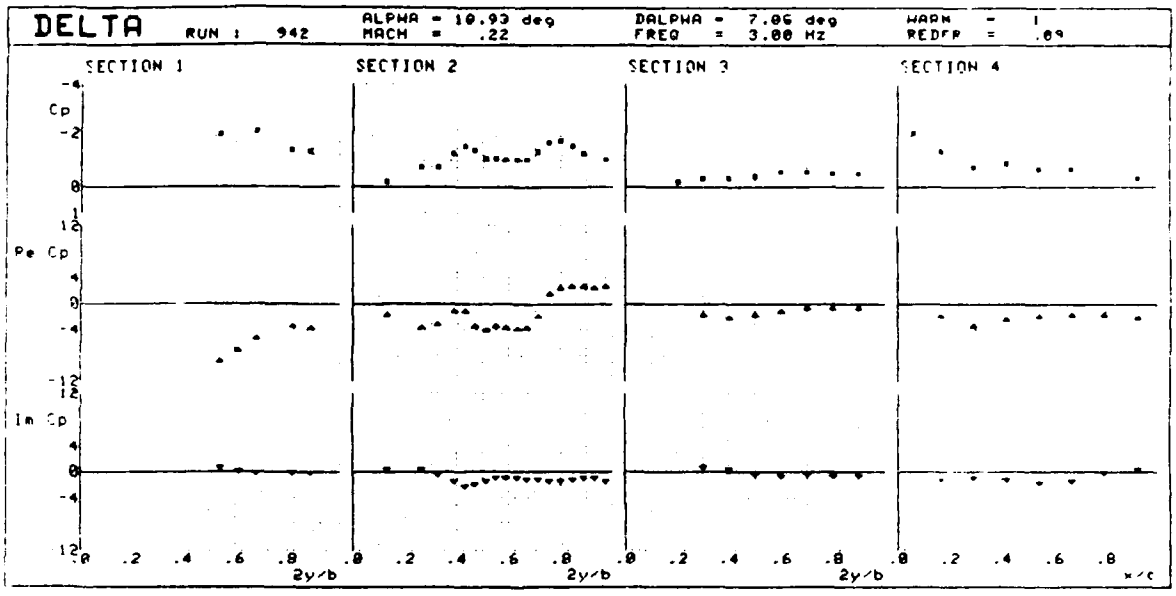

DELTA
RUN : 937
ALPHA = 10.98 deg
MACH = .22
DALPHA = 1.73 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

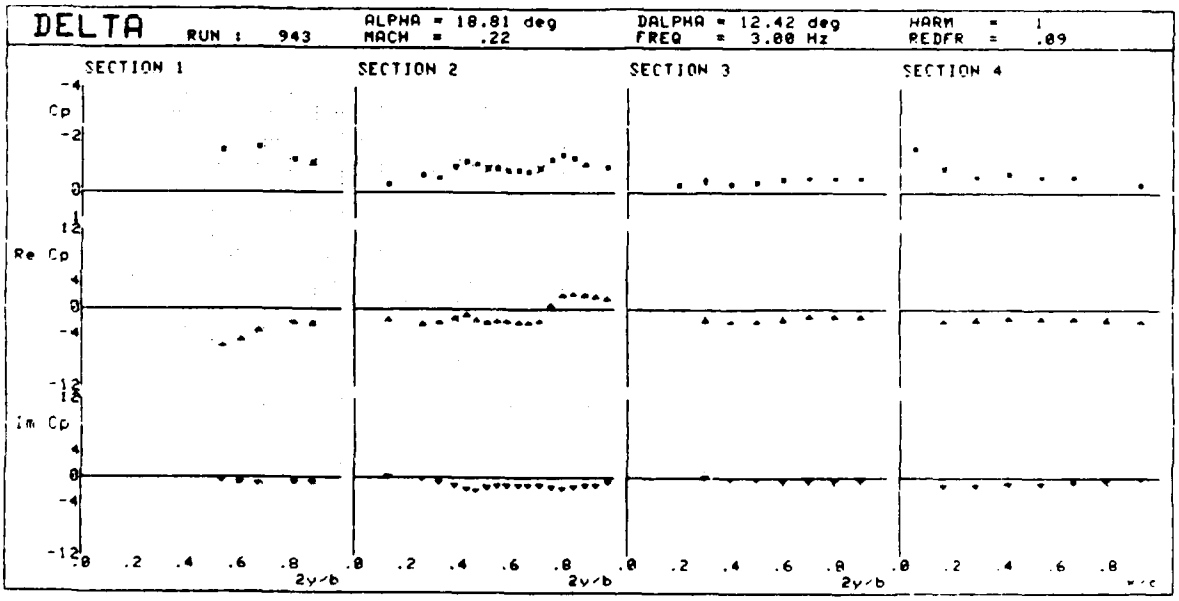

DELTA
RUN : 938
ALPHA = 10.96 deg
MACH = .22
DALPHA = 3.45 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

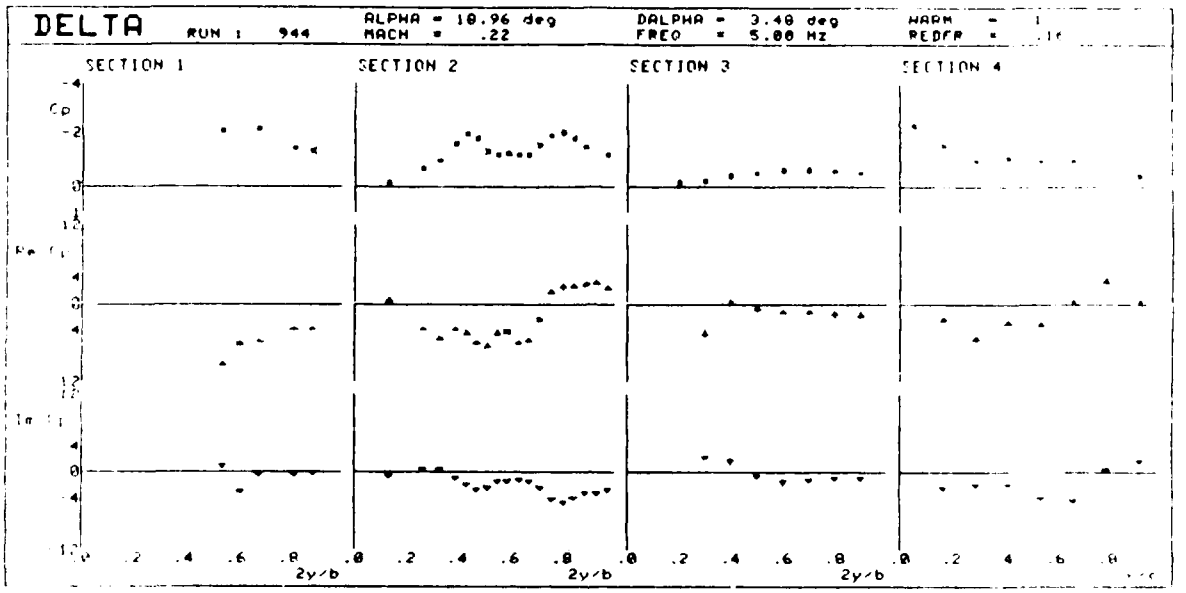

DELTA
RUN : 939
ALPHA = 18.90 deg
MACH = .22
DALPHA = 6.93 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

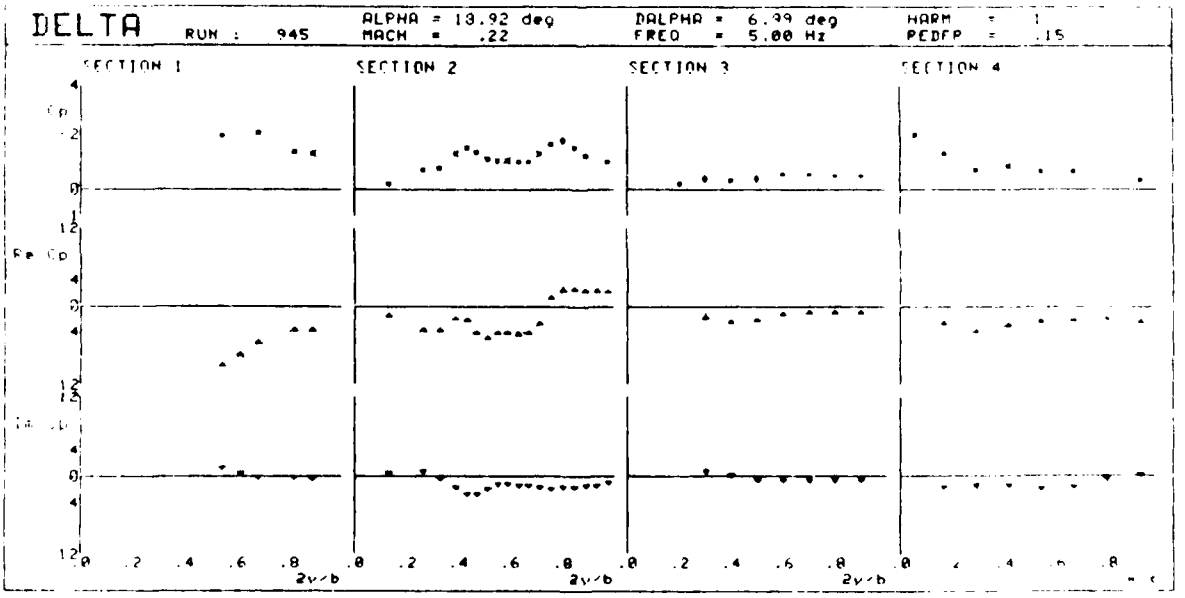

DELTA
RUN : 940
ALPHA = 10.97 deg
MACH = .22
DALPHA = 1.73 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

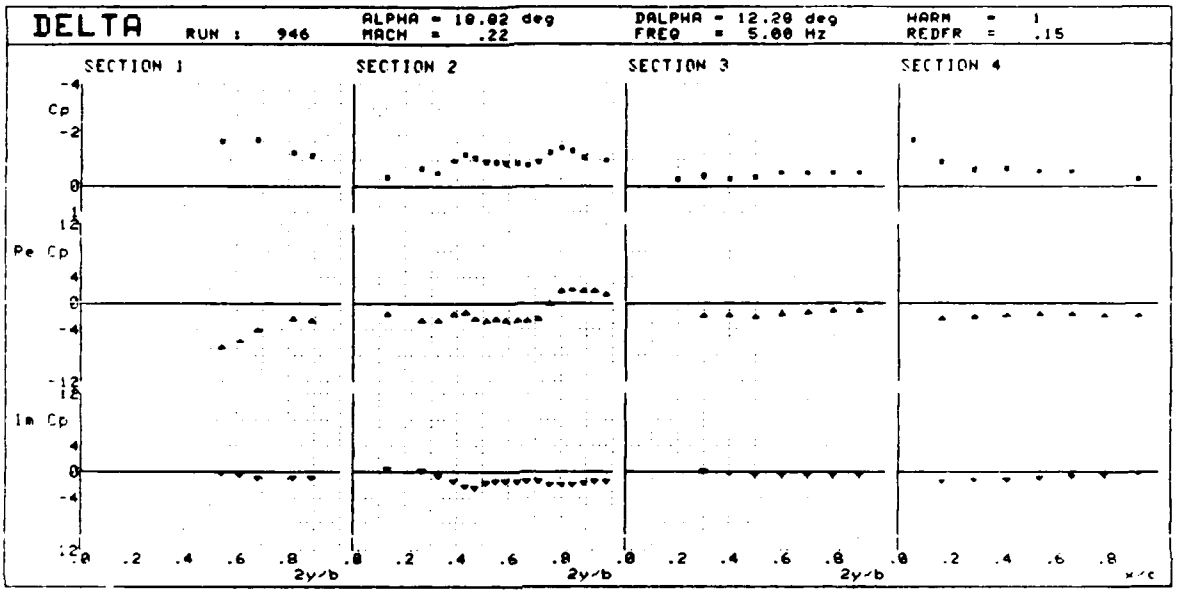

DELTA
RUN : 941
ALPHA = 18.95 deg
MACH = .22
DALPHA = 3.53 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

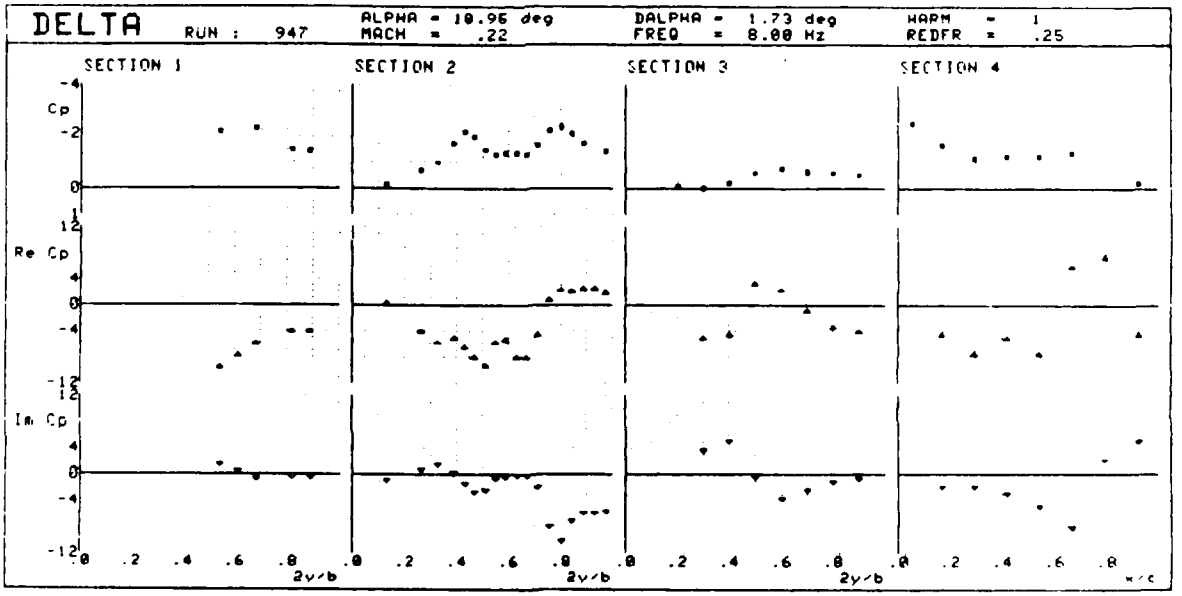

DELTA
RUN : 942
ALPHA = 10.93 deg
MACH = .22
DALPHA = 7.06 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

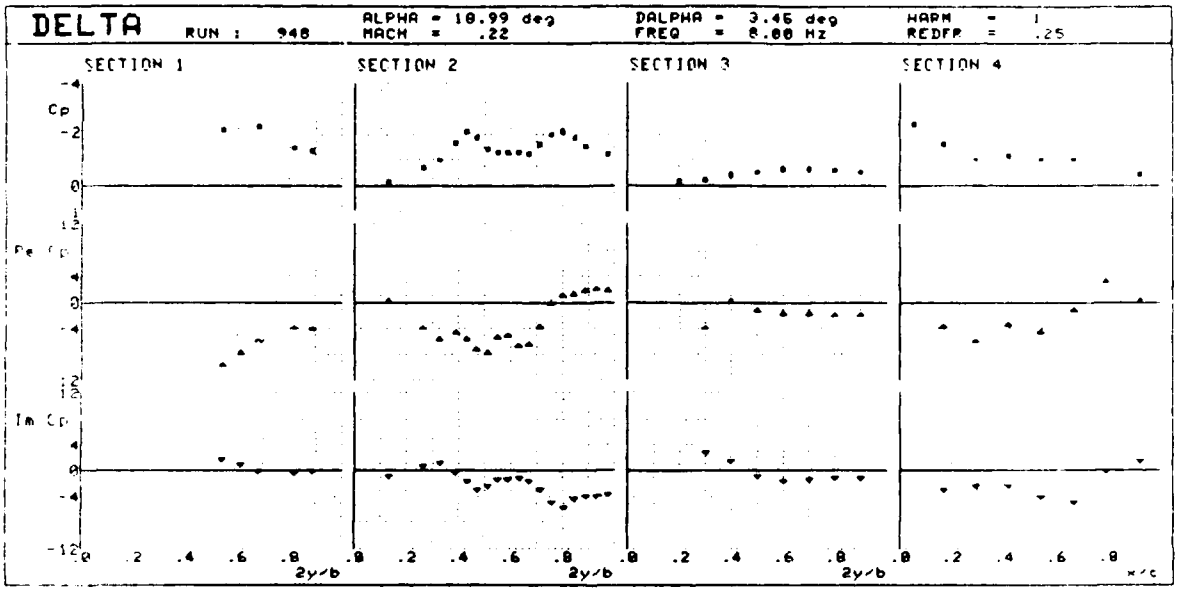

DELTA
RUN : 943
ALPHA = 18.81 deg
MACH = .22
DALPHA = 12.42 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

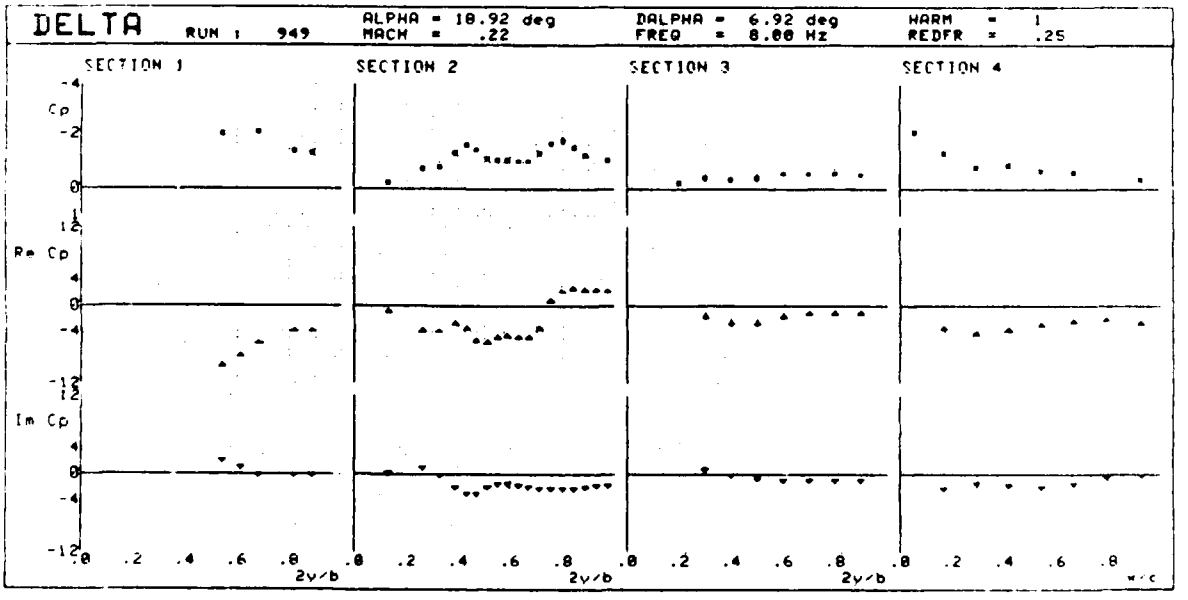

DELTA
RUN : 944
ALPHA = 10.96 deg
MACH = .22
DALPHA = 3.40 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
2y/b

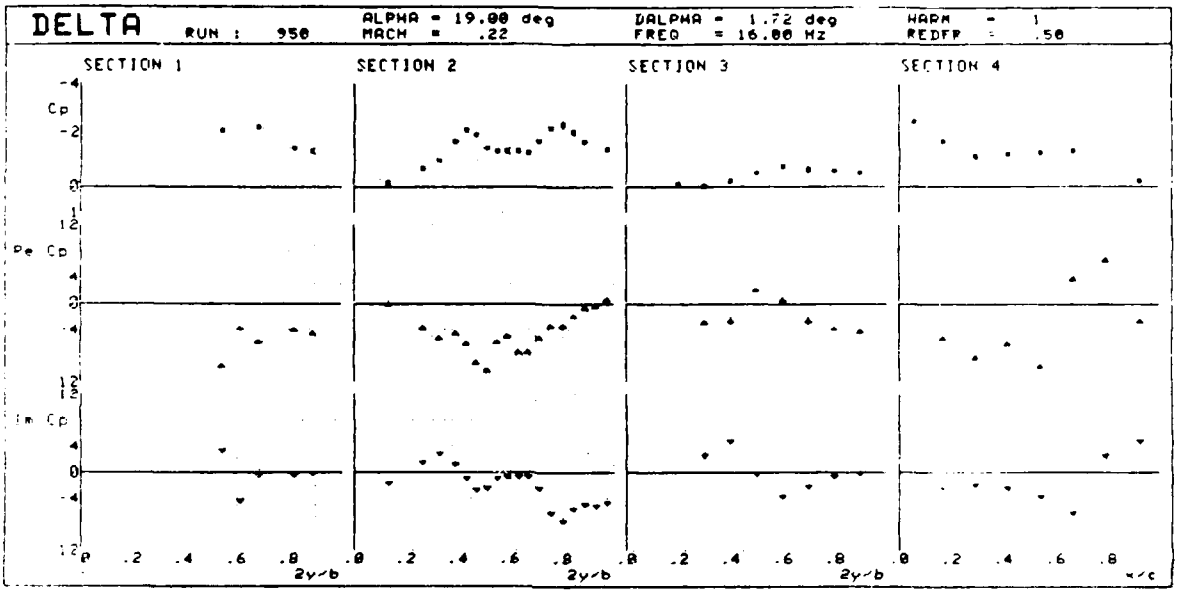

DELTA
RUN : 945
ALPHA = 13.92 deg
MACH = .22
DALPHA = 6.99 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
2y/b

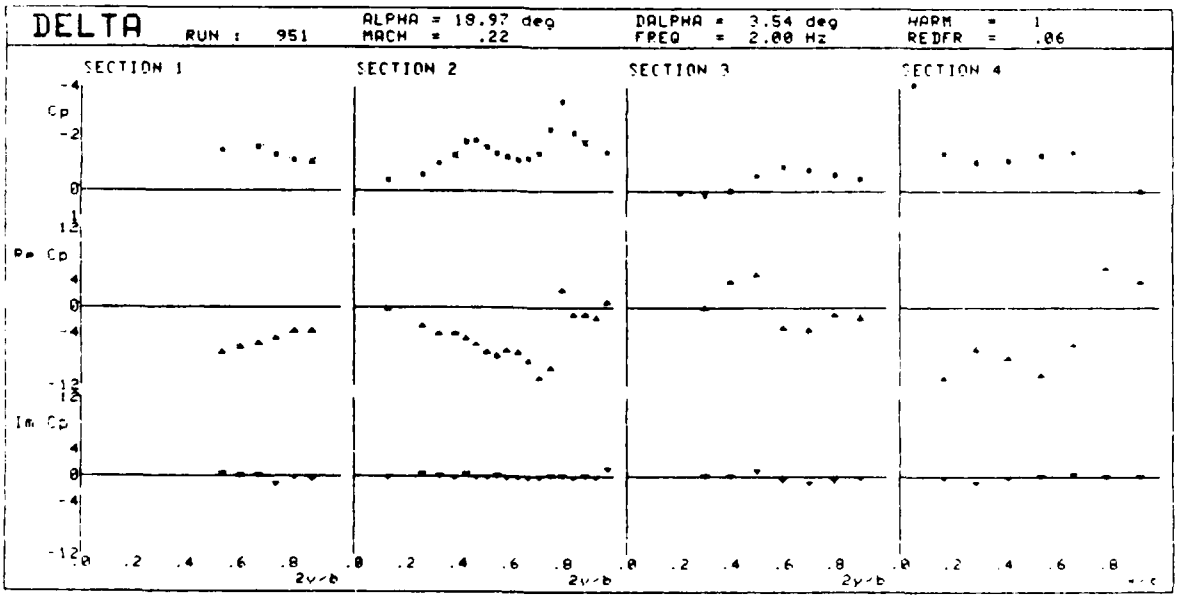

DELTA
RUN : 946
ALPHA = 10.02 deg
MACH = .22
DALPHA = 12.20 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

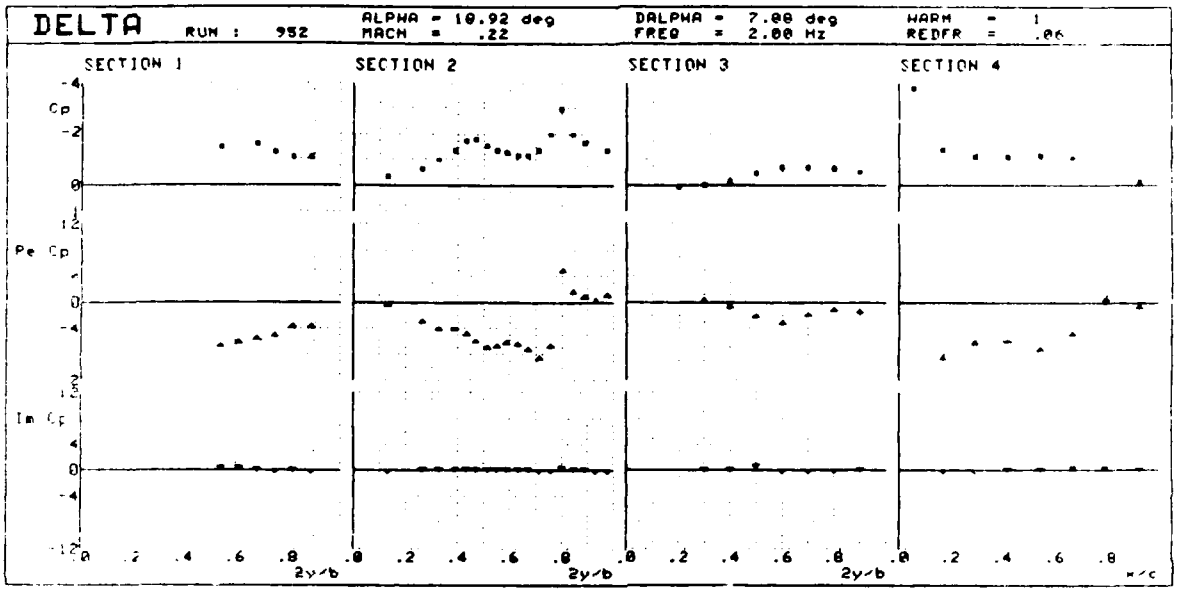

DELTA
RUN : 947
ALPHA = 10.96 deg
MACH = .22
DALPHA = 1.73 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

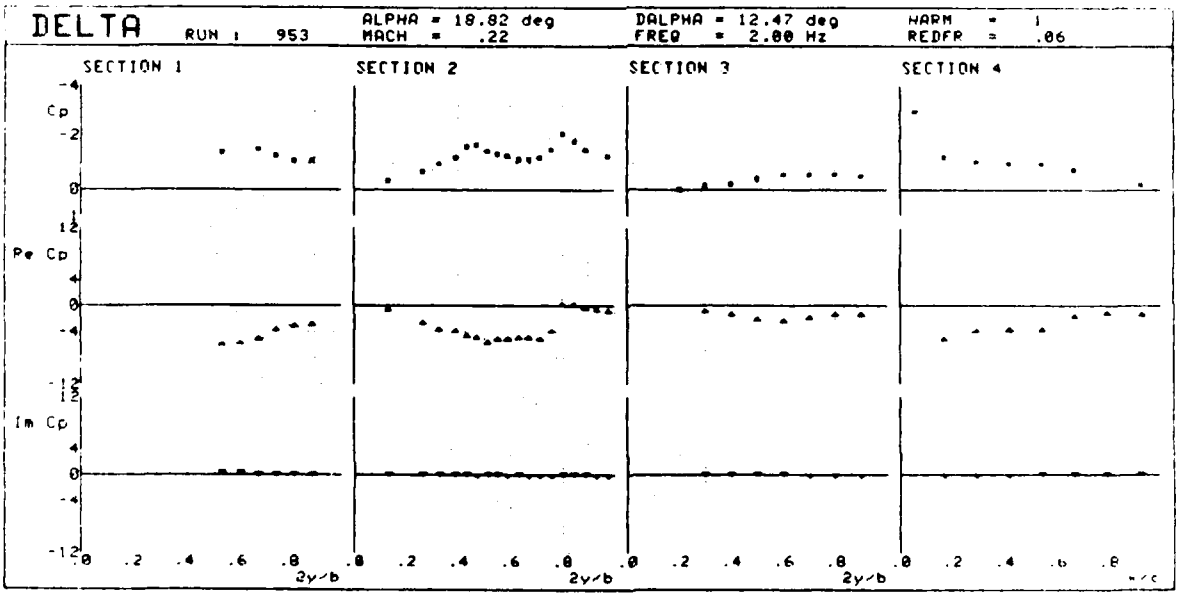

DELTA
RUN : 948
ALPHA = 10.99 deg
MACH = .22
DALPHA = 3.46 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

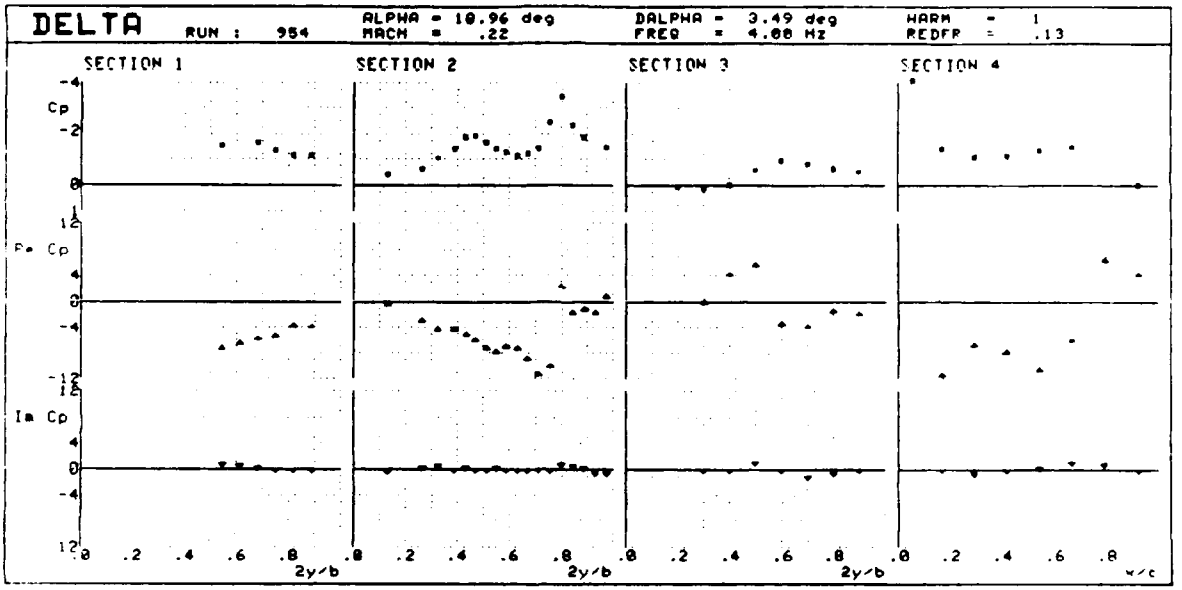

DELTA
RUN : 949
ALPHA = 10.92 deg
MACH = .22
DALPHA = 6.92 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

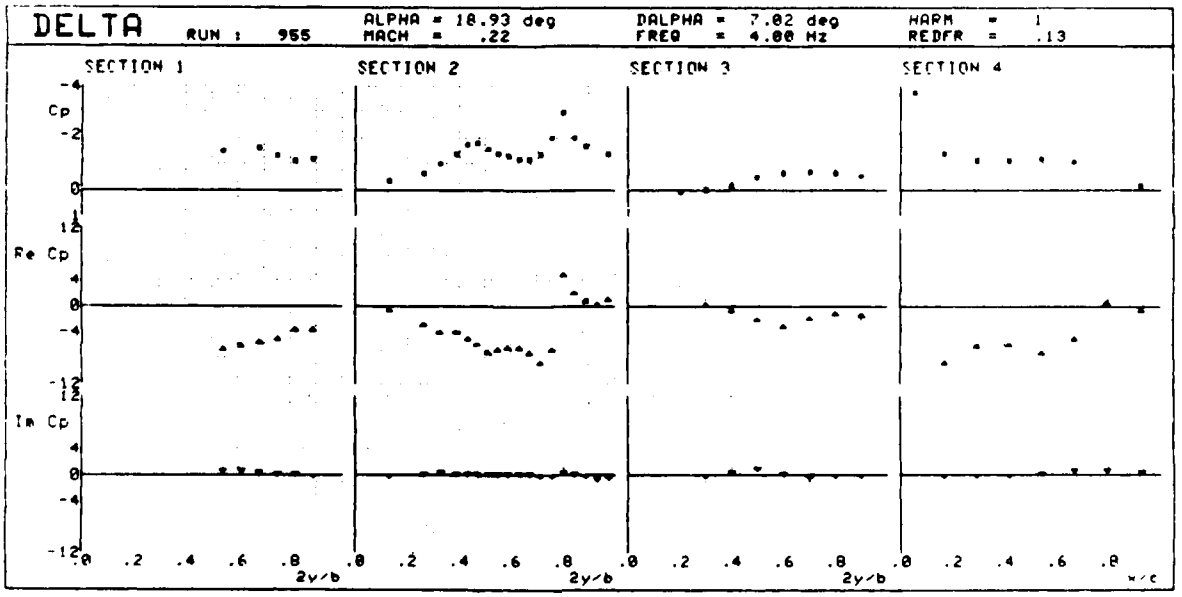

DELTA
RUN : 950
ALPHA = 19.00 deg
MACH = .22
DALPHA = 1.72 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

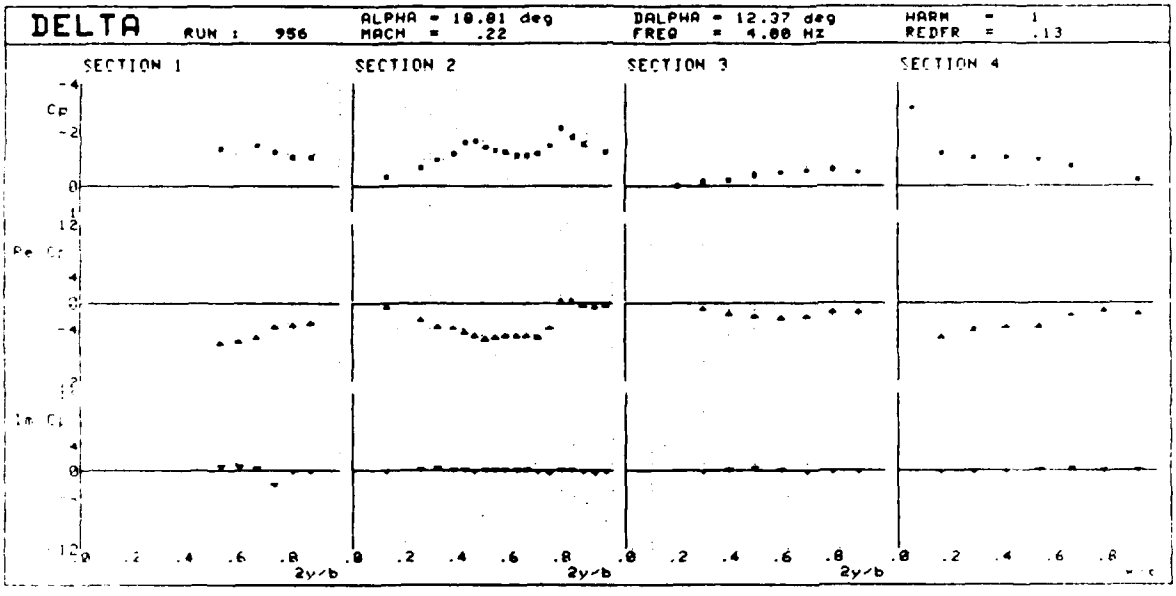

DELTA
RUN : 951
ALPHA = 18.97 deg
MACH = .22
DALPHA = 3.54 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

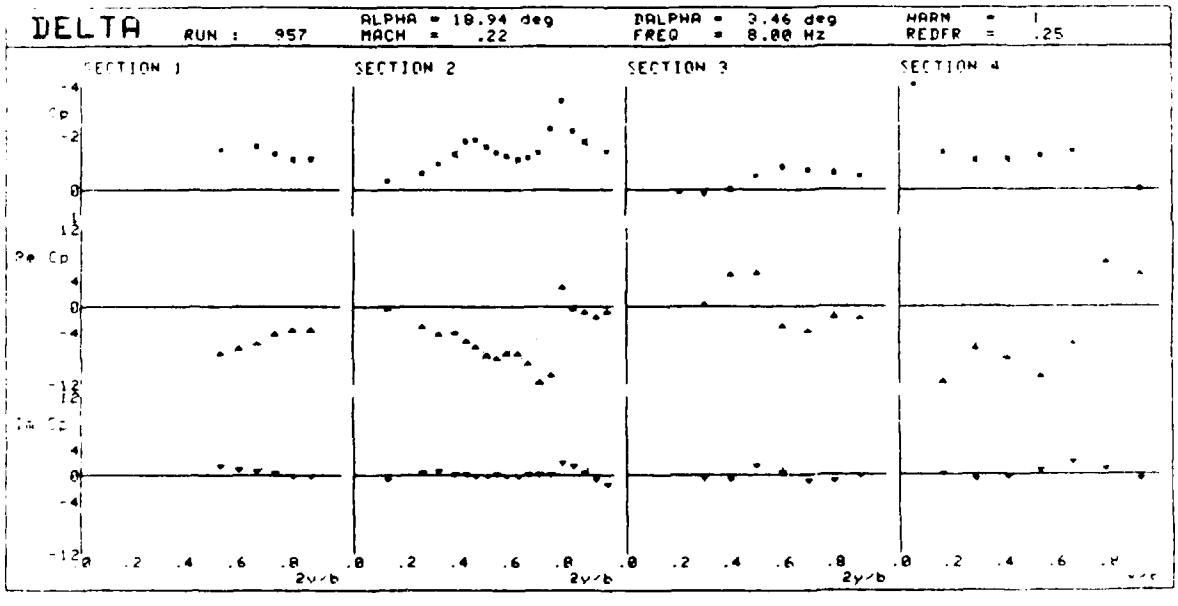

DELTA
RUN : 952
ALPHA = 10.92 deg
MACH = .22
DALPHA = 7.00 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

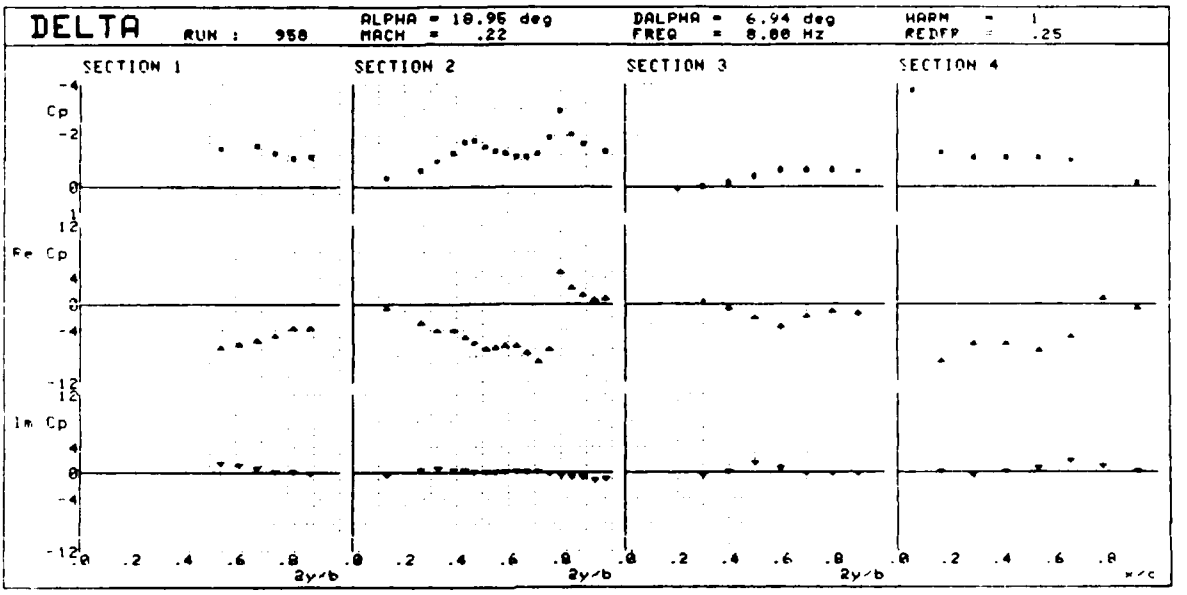

DELTA
RUN : 953
ALPHA = 18.82 deg
MACH = .22
DALPHA = 12.47 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

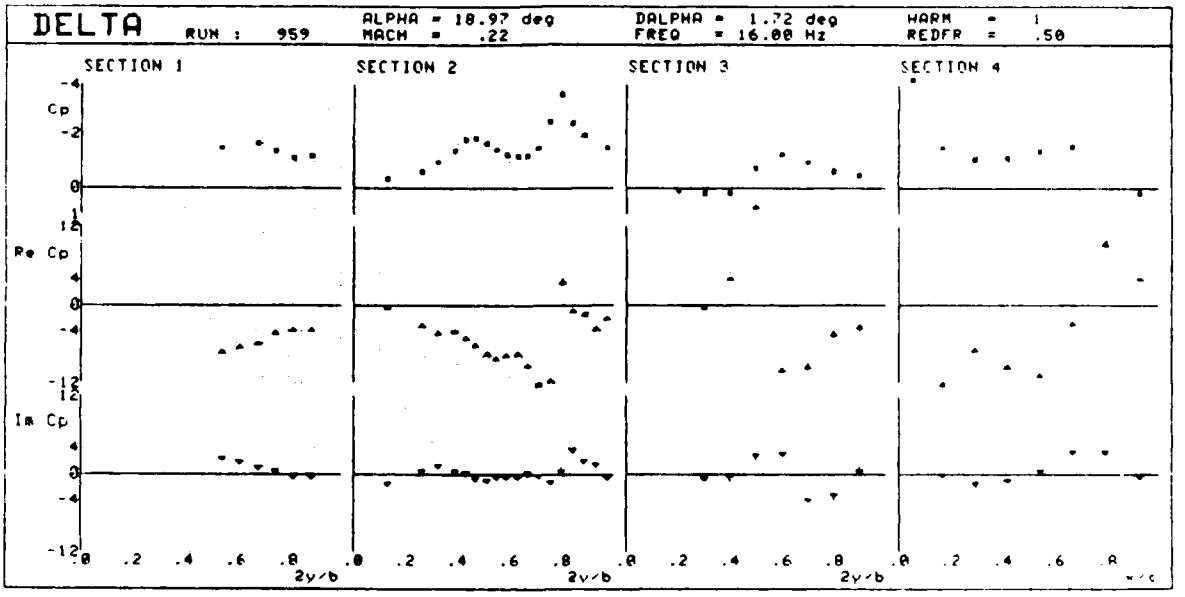

DELTA
RUN : 954
ALPHA = 10.96 deg
MACH = .22
DALPHA = 3.49 deg
FREQ = 4.00 Hz
HARM = 1
REDFR = .13
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

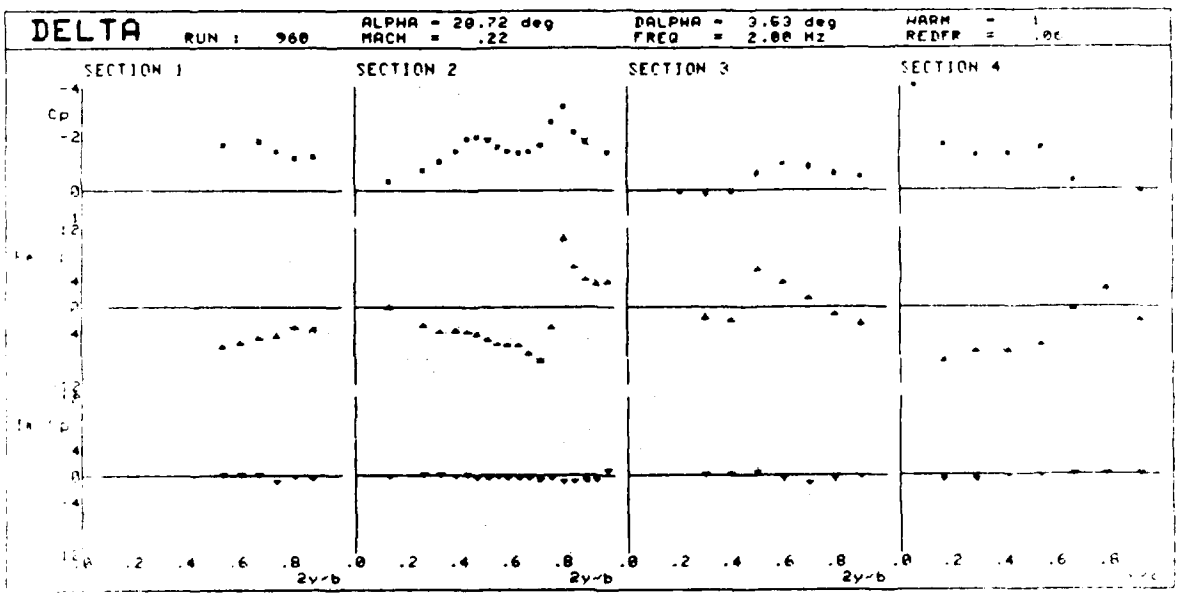

DELTA
RUN : 955
ALPHA = 18.93 deg
MACH = .22
DALPHA = 7.02 deg
FREQ = 4.00 Hz
HARM = 1
REDFR = .13
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

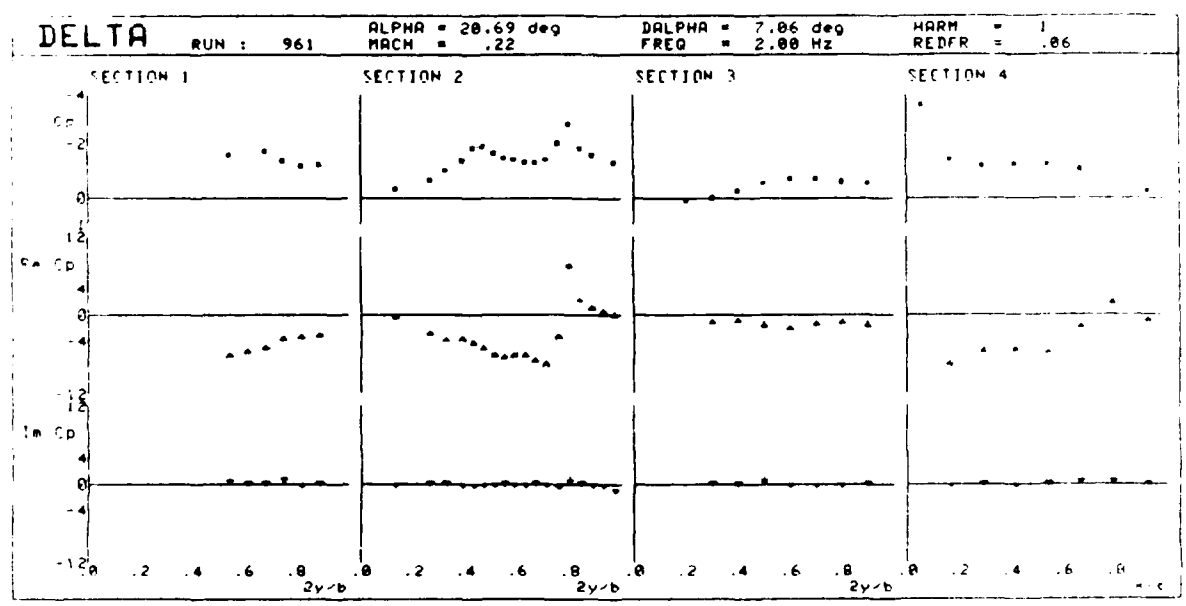

DELTA
RUN : 956
ALPHA = 10.01 deg
MACH = .22
DALPHA = 12.37 deg
FREQ = 4.00 Hz
HARM = 1
REDFR = .13
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

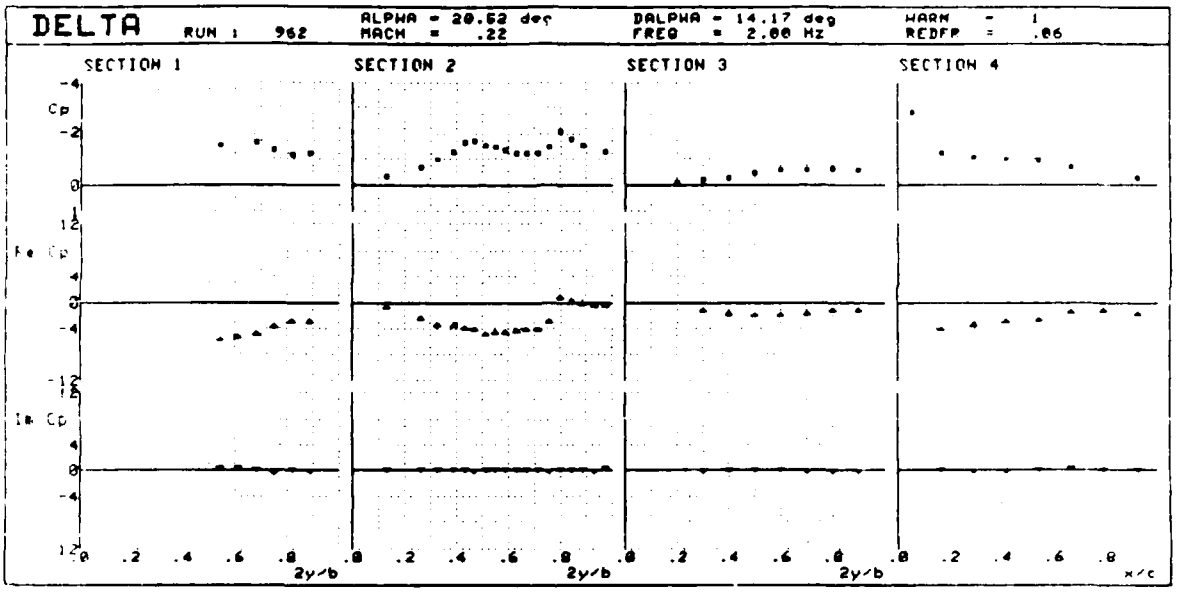

DELTA
RUN : 957
ALPHA = 10.94 deg
MACH = .22
DALPHA = 3.46 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b

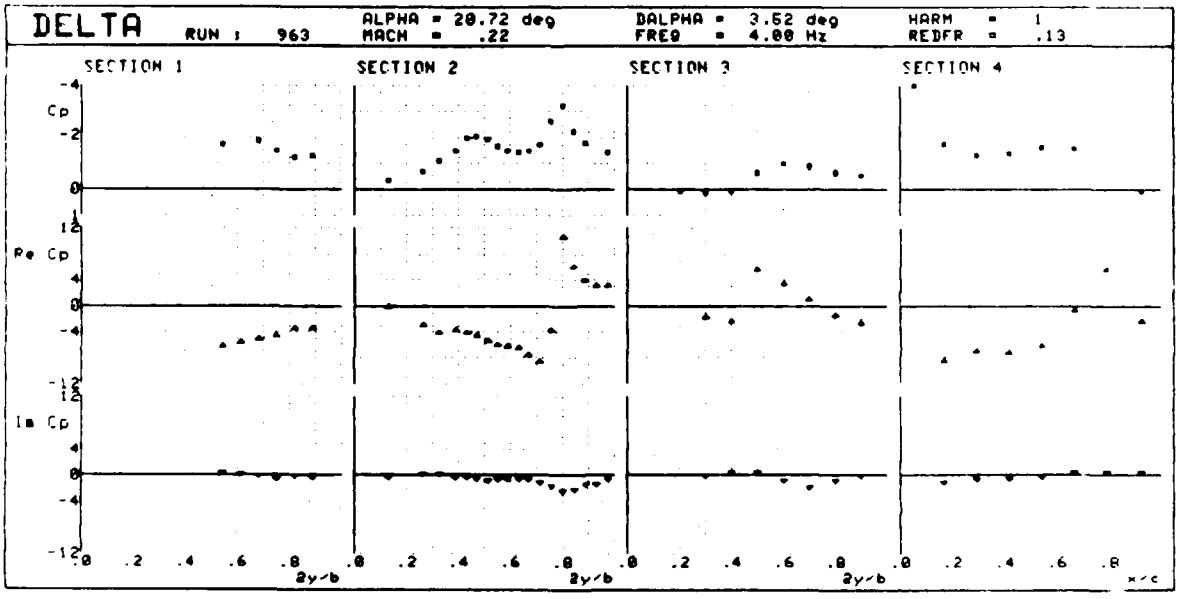

DELTA
RUN : 958
ALPHA = 10.95 deg
MACH = .22
DALPHA = 6.94 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

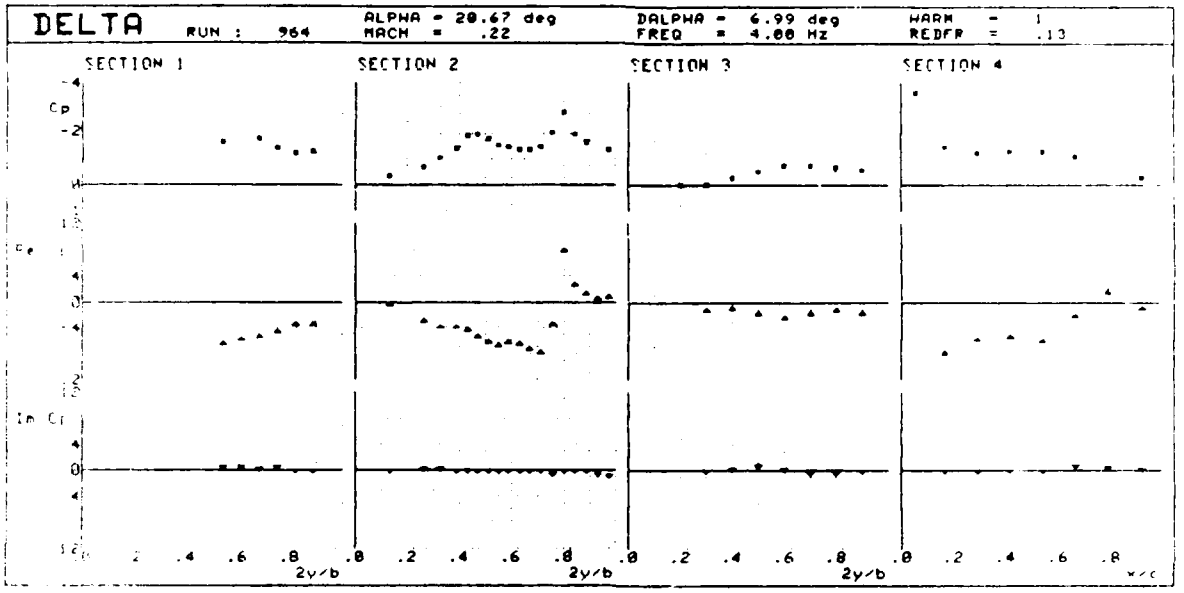

DELTA
RUN : 959
ALPHA = 10.97 deg
MACH = .22
DALPHA = 1.72 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

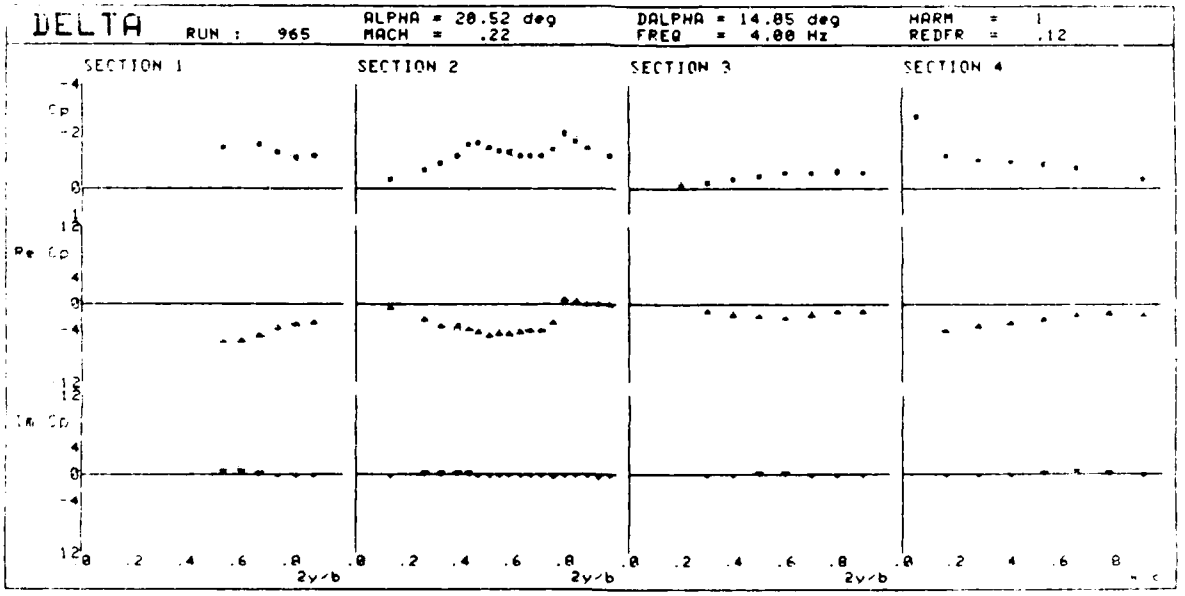

DELTA
RUN : 960
ALPHA = 20.72 deg
MACH = .22
DALPHA = 3.63 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
2y/b

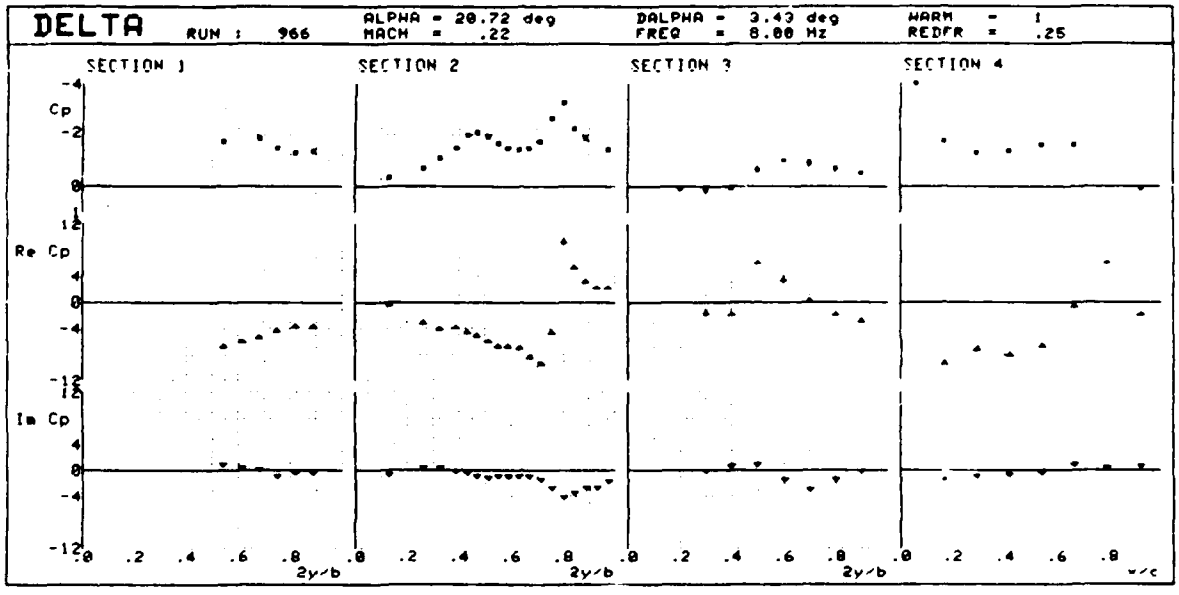

DELTA
RUN : 961
ALPHA = 20.69 deg
MACH = .22
DALPHA = 7.06 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
2y/b

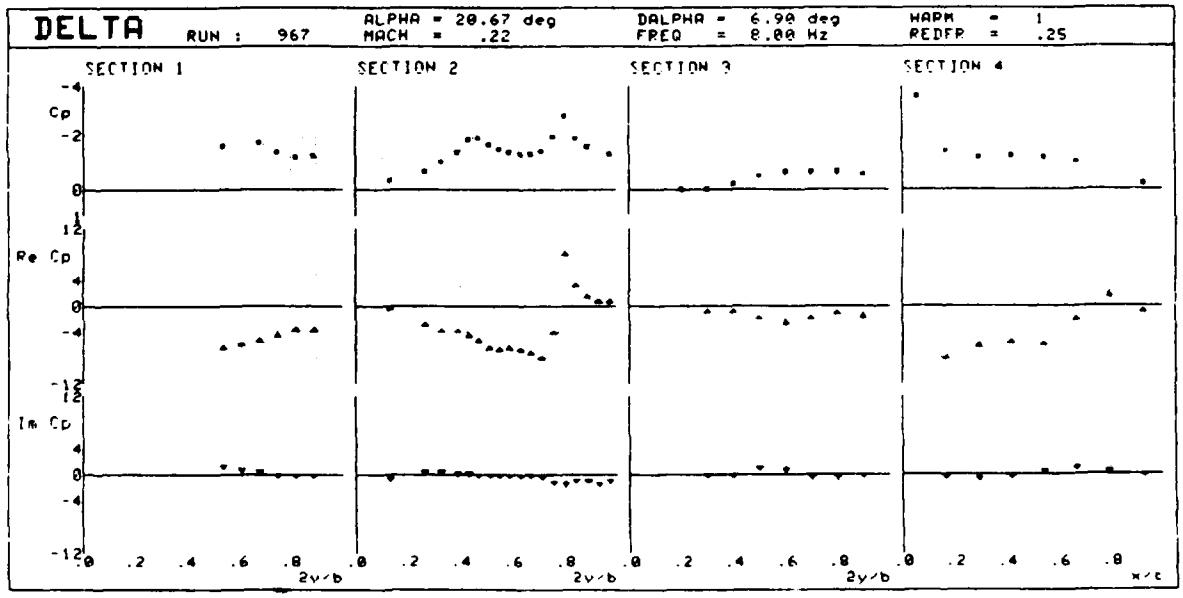

DELTA
RUN : 962
ALPHA = 20.62 deg
MACH = .22
DALPHA = 14.17 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

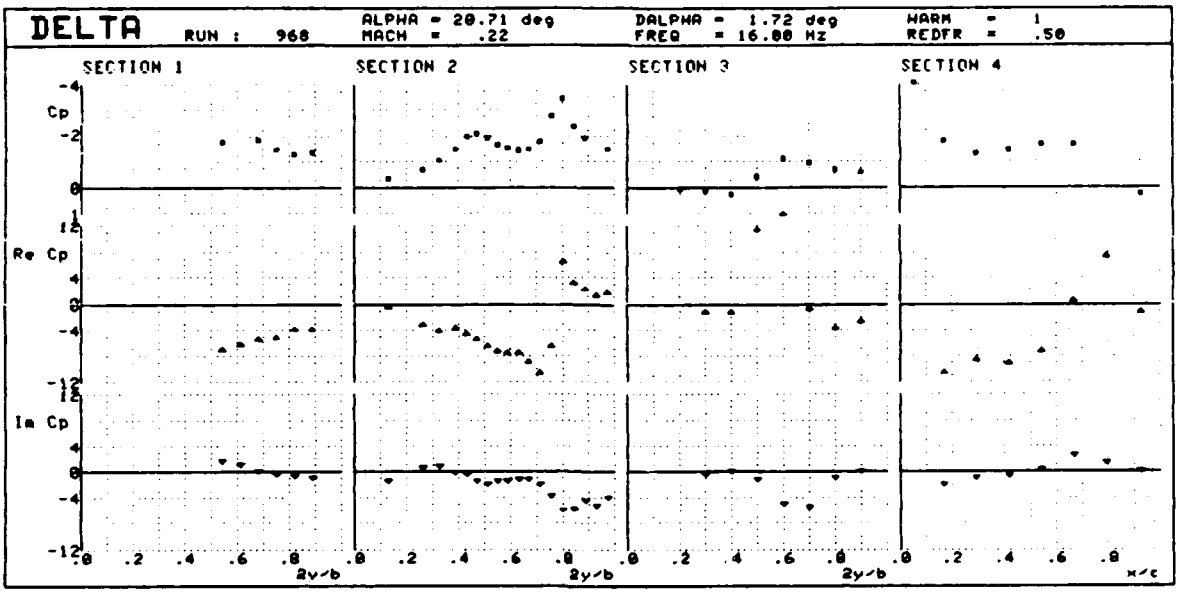

DELTA
RUN : 963
ALPHA = 20.72 deg
MACH = .22
DALPHA = 3.52 deg
FREQ = 4.00 Hz
HARM = 1
REDFR = .13
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

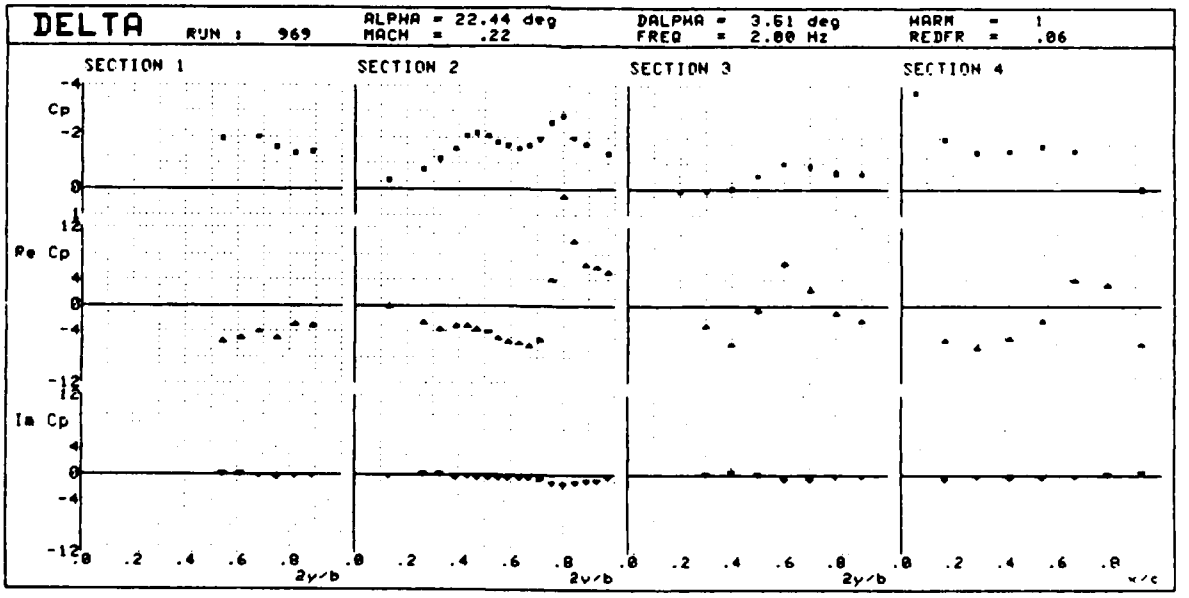

DELTA
RUN : 964
ALPHA = 20.67 deg
MACH = .22
DALPHA = 6.99 deg
FREQ = 4.00 Hz
HARM = 1
REDFR = .13
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
2y/b

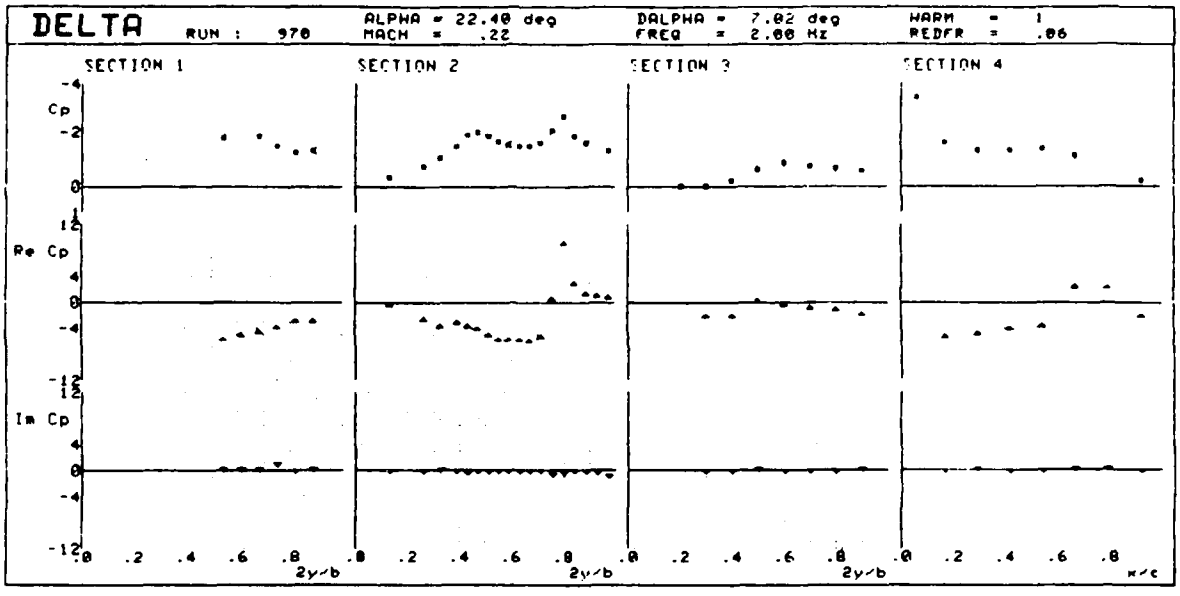

DELTA
RUN : 965
ALPHA = 20.52 deg
MACH = .22
DALPHA = 14.85 deg
FREQ = 4.00 Hz
HARM = 1
REDFR = .12
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
2y/b

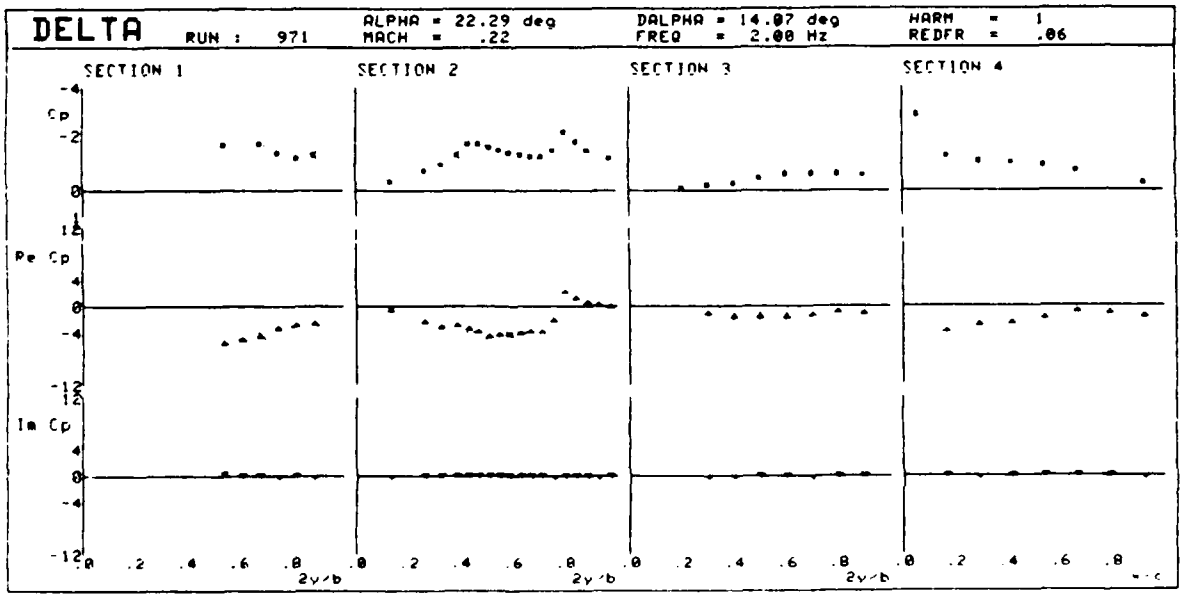

DELTA
RUN : 966
ALPHA = 20.72 deg
MACH = .22
DALPHA = 3.43 deg
FREQ = 8.00 Hz
WARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

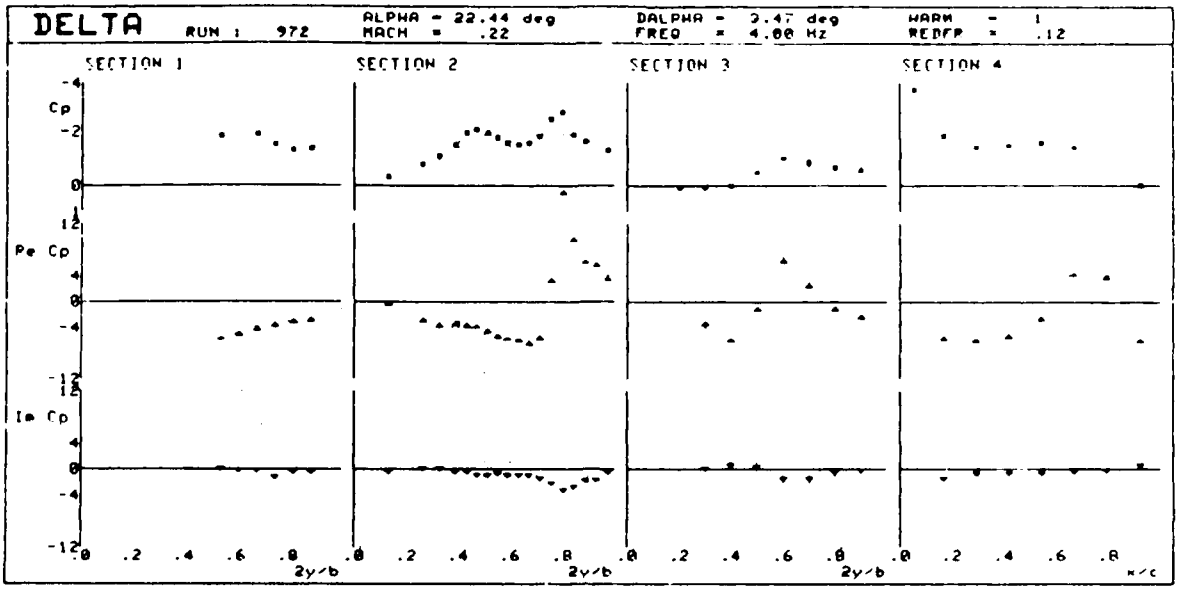

DELTA
RUN : 967
ALPHA = 20.67 deg
MACH = .22
DALPHA = 6.90 deg
FREQ = 8.00 Hz
WARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

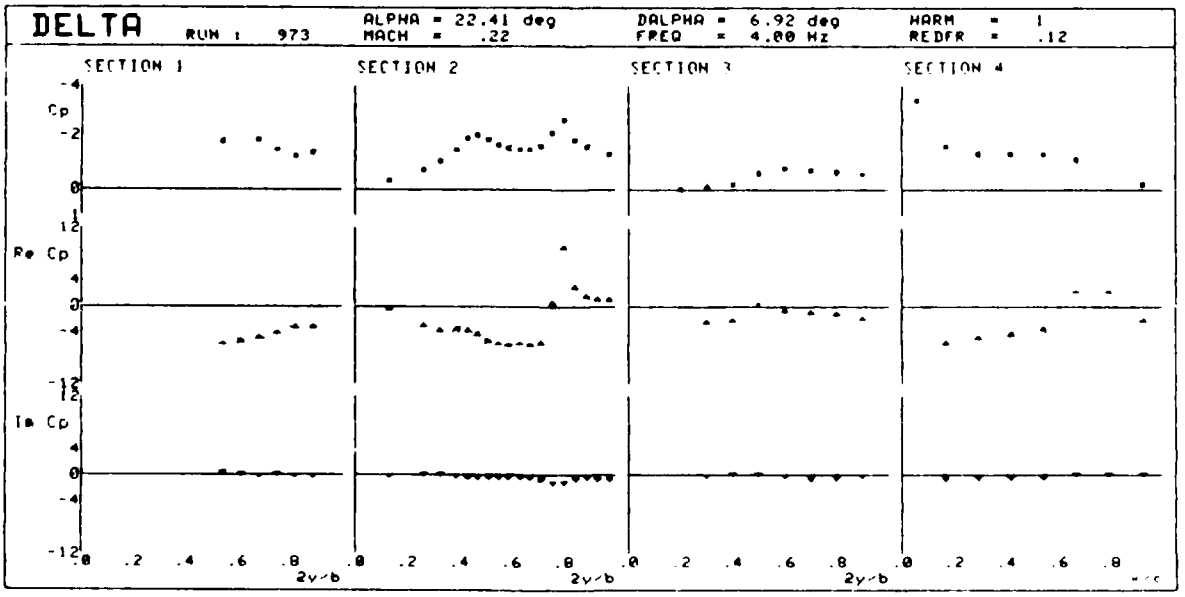

DELTA
RUN : 968
ALPHA = 20.71 deg
MACH = .22
DALPHA = 1.72 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

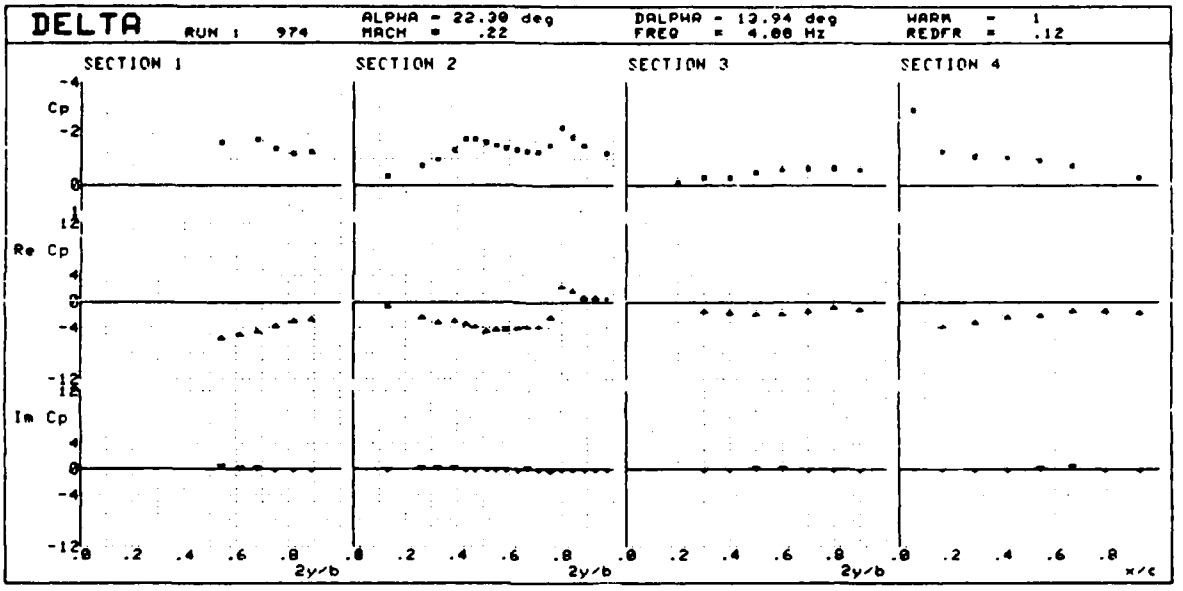

DELTA
RUN : 969
ALPHA = 22.44 deg
MACH = .22
DALPHA = 3.61 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

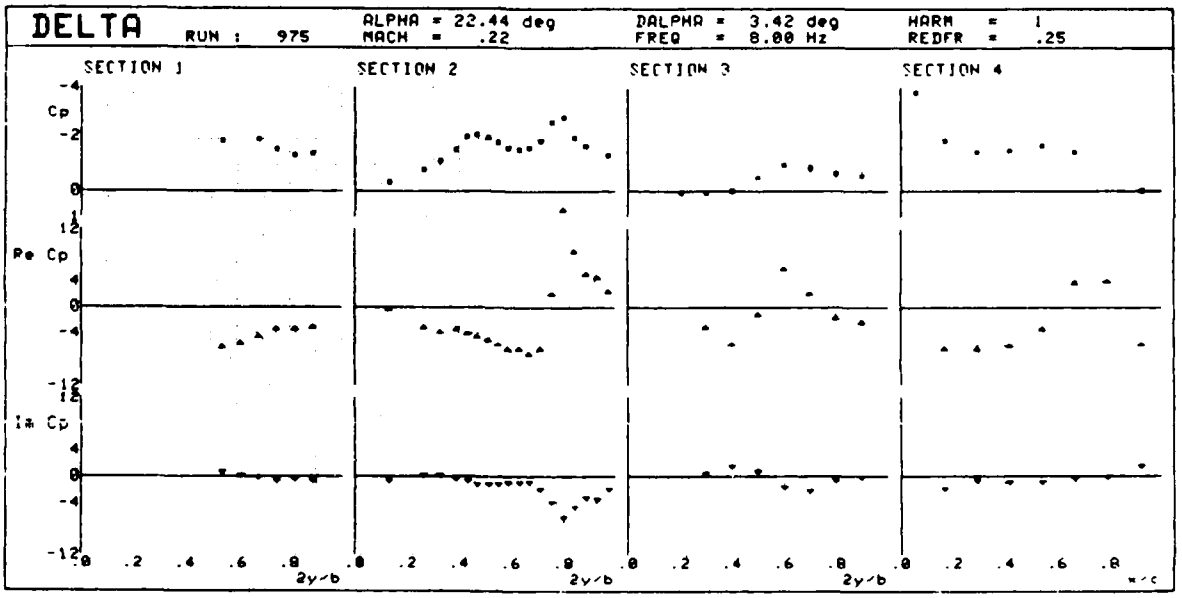

DELTA
RUN : 970
ALPHA = 22.40 deg
MACH = .22
DALPHA = 7.02 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

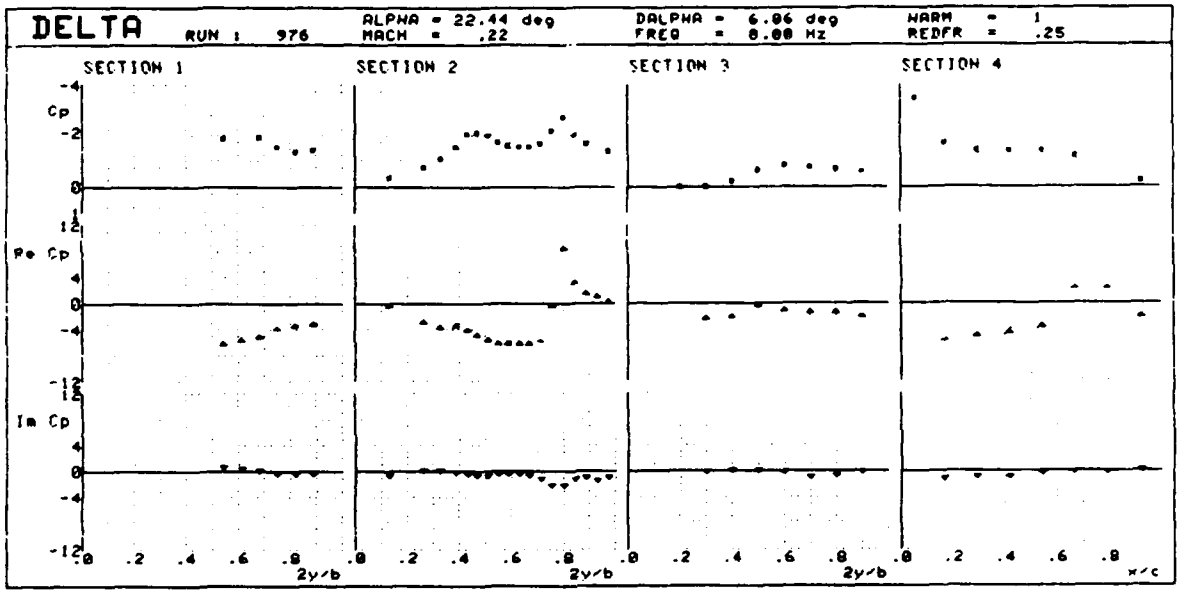

DELTA
RUN : 971
ALPHA = 22.29 deg
MACH = .22
DALPHA = 14.07 deg
FREQ = 2.00 Hz
HARM = 1
REDFR = .06
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

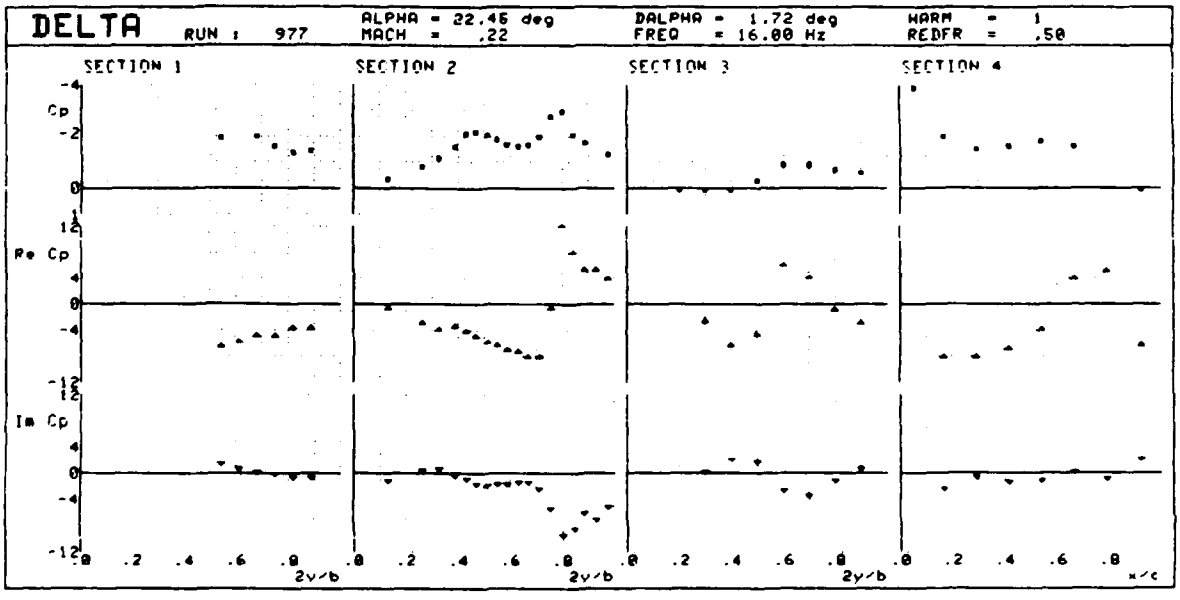

DELTA
RUN : 972
ALPHA = 22.44 deg
MACH = .22
DALPHA = 3.47 deg
FREQ = 4.00 Hz
HARM = 1
REDFR = .12
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

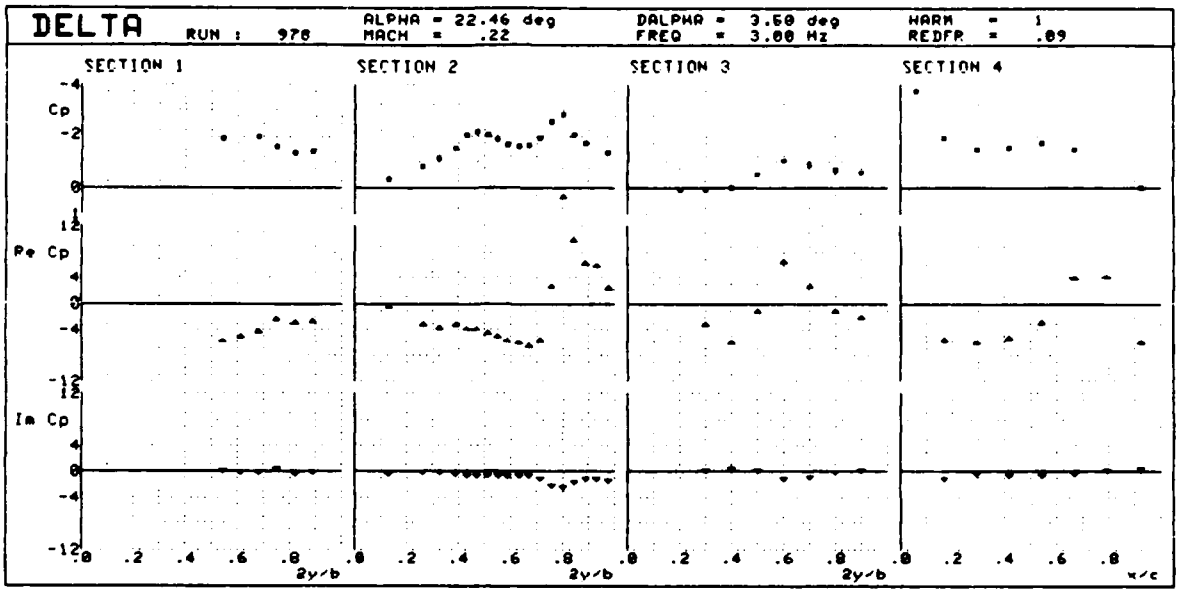

DELTA
RUN : 973
ALPHA = 22.41 deg
MACH = .22
DALPHA = 6.92 deg
FREQ = 4.00 Hz
HARM = 1
REDFR = .12
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

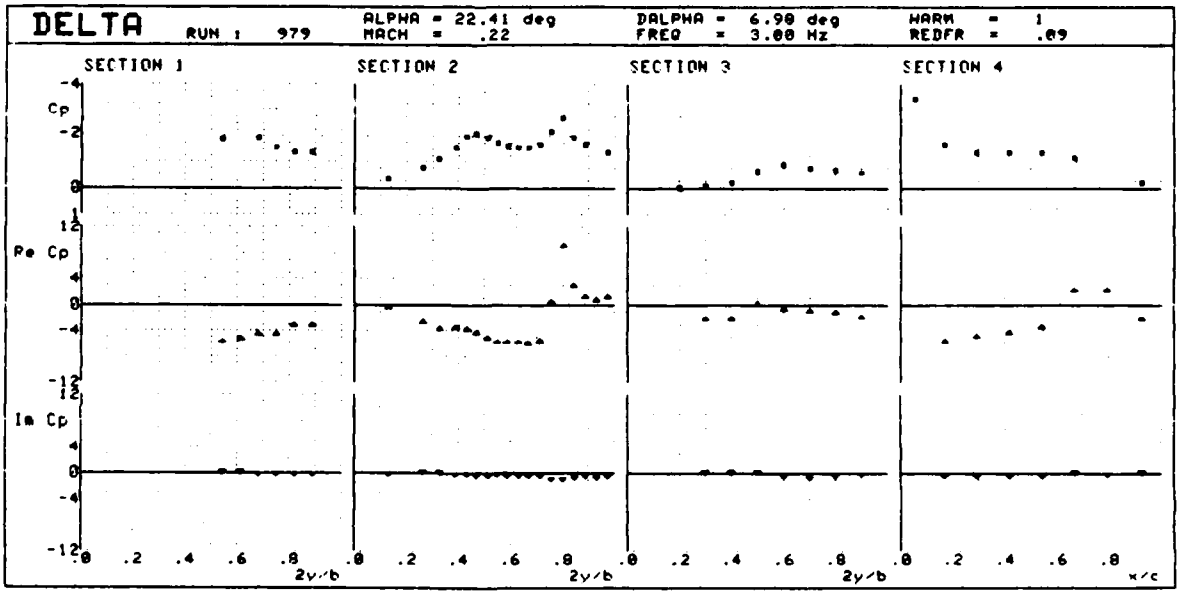

DELTA
RUN : 974
ALPHA = 22.30 deg
MACH = .22
DALPHA = 12.94 deg
FREQ = 4.00 Hz
HARM = 1
REDFR = .12
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

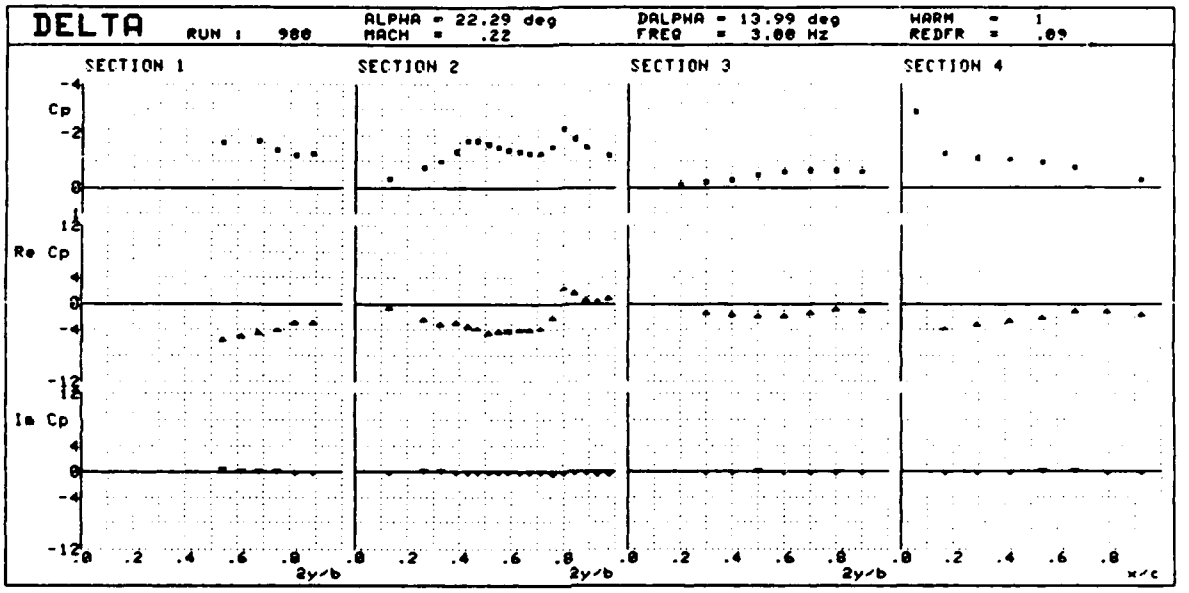

DELTA
RUN : 975
ALPHA = 22.44 deg
MACH = .22
DALPHA = 3.42 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

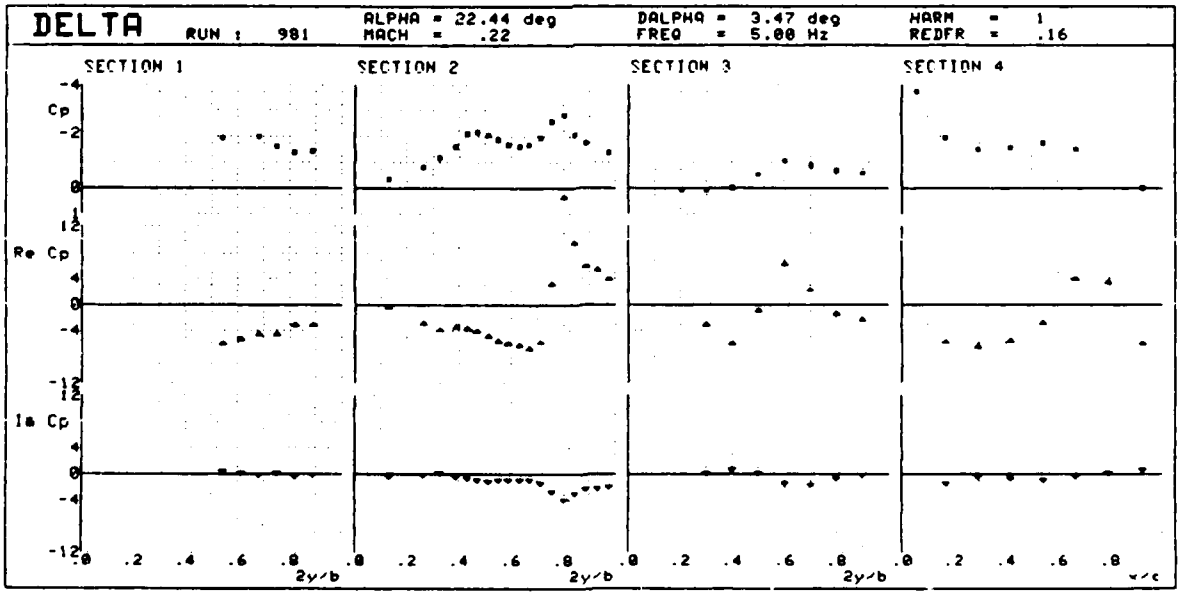

DELTA
RUN : 976
ALPHA = 22.44 deg
MACH = .22
DALPHA = 6.06 deg
FREQ = 0.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

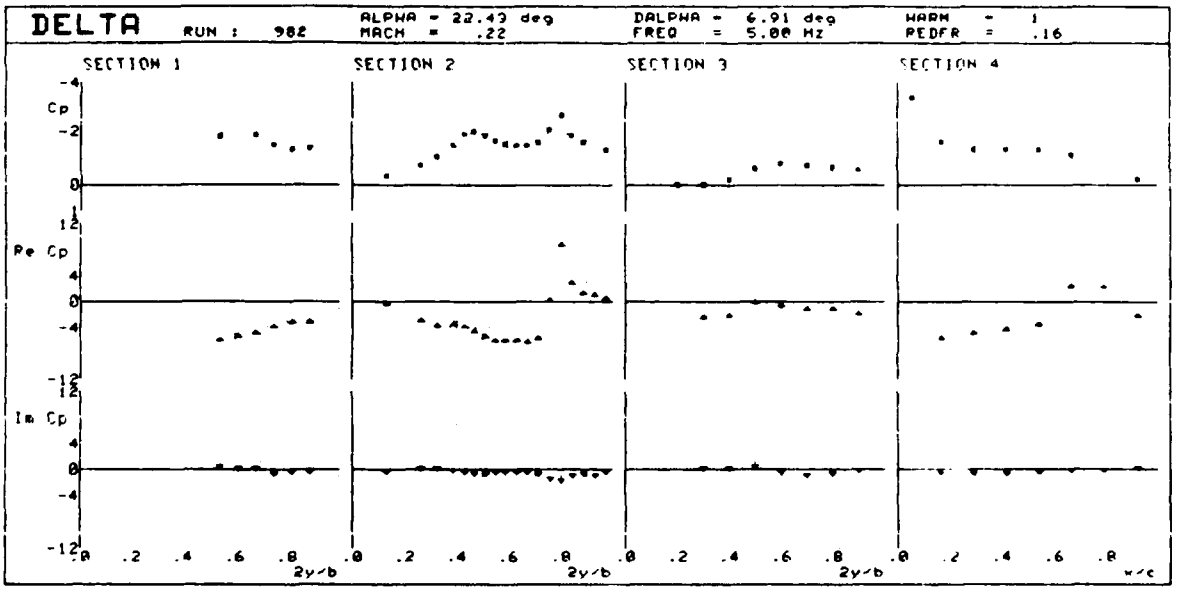

DELTA
RUN : 977
ALPHA = 22.46 deg
MACH = .22
DALPHA = 1.72 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

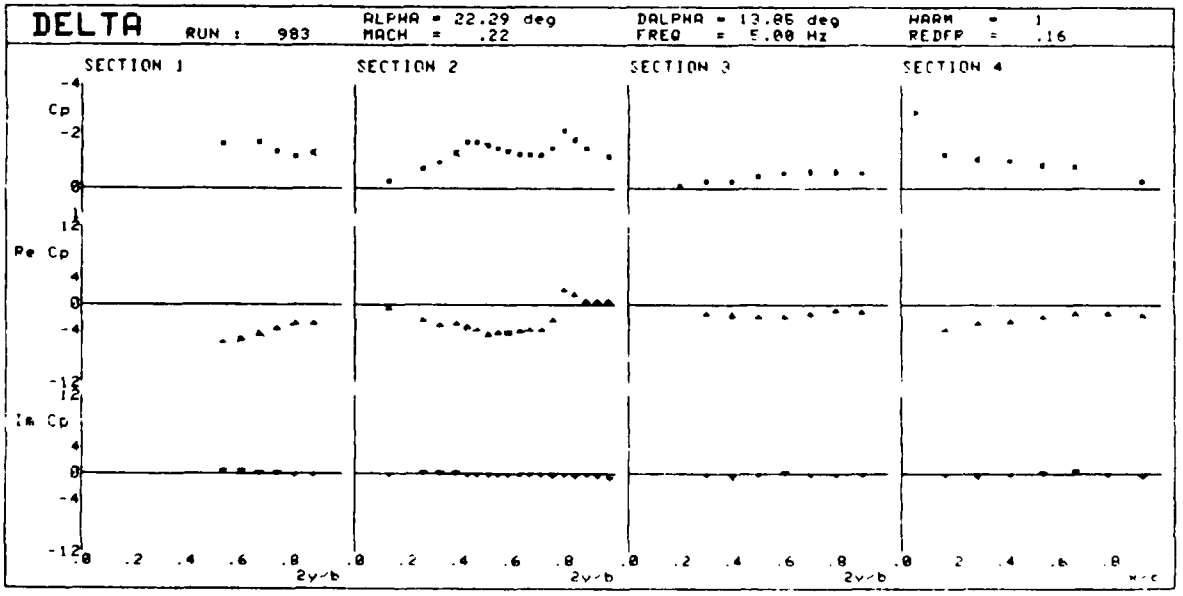

DELTA
RUN : 978
ALPHA = 22.46 deg
MACH = .22
DALPHA = 3.60 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

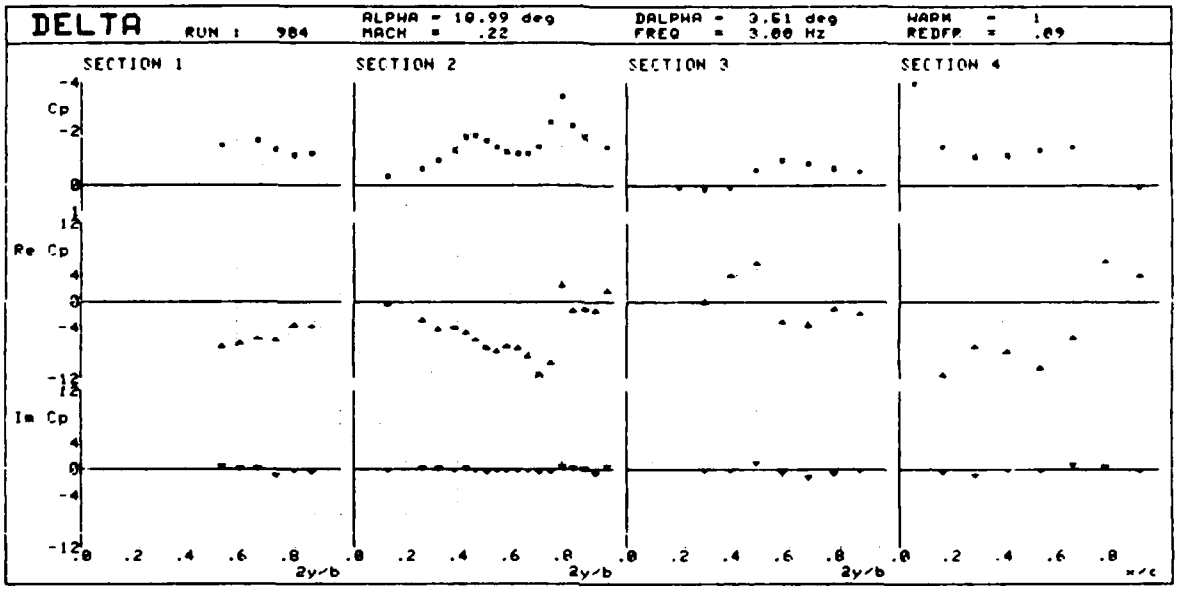

DELTA
RUN : 979
ALPHA = 22.41 deg
MACH = .22
DALPHA = 6.98 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

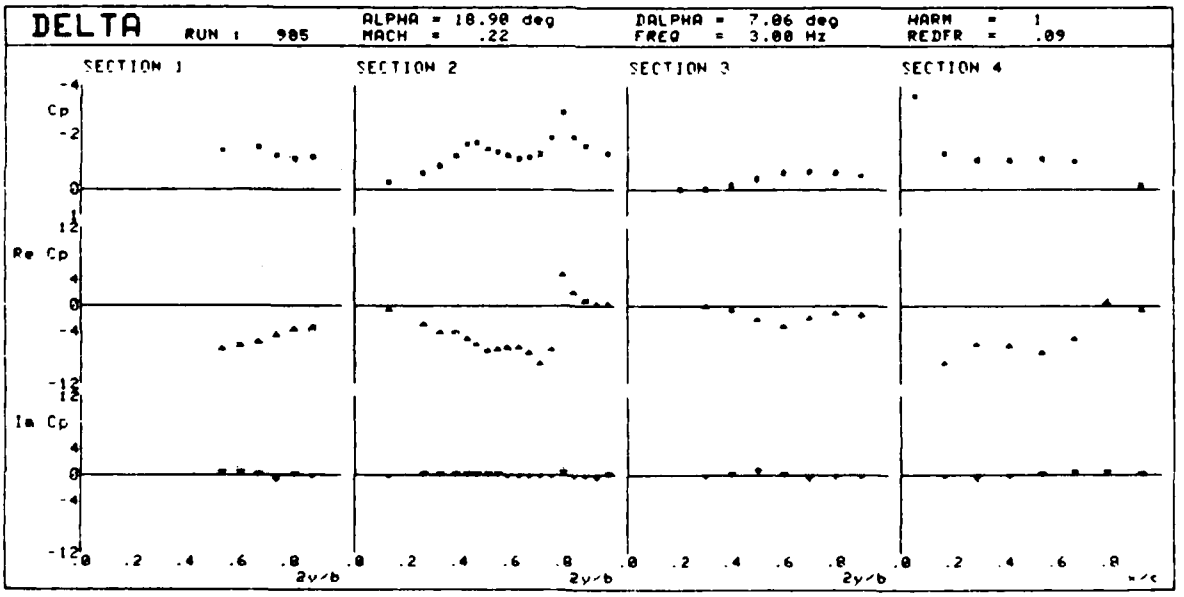

DELTA
RUN : 980
ALPHA = 22.29 deg
MACH = .22
DALPHA = 13.99 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

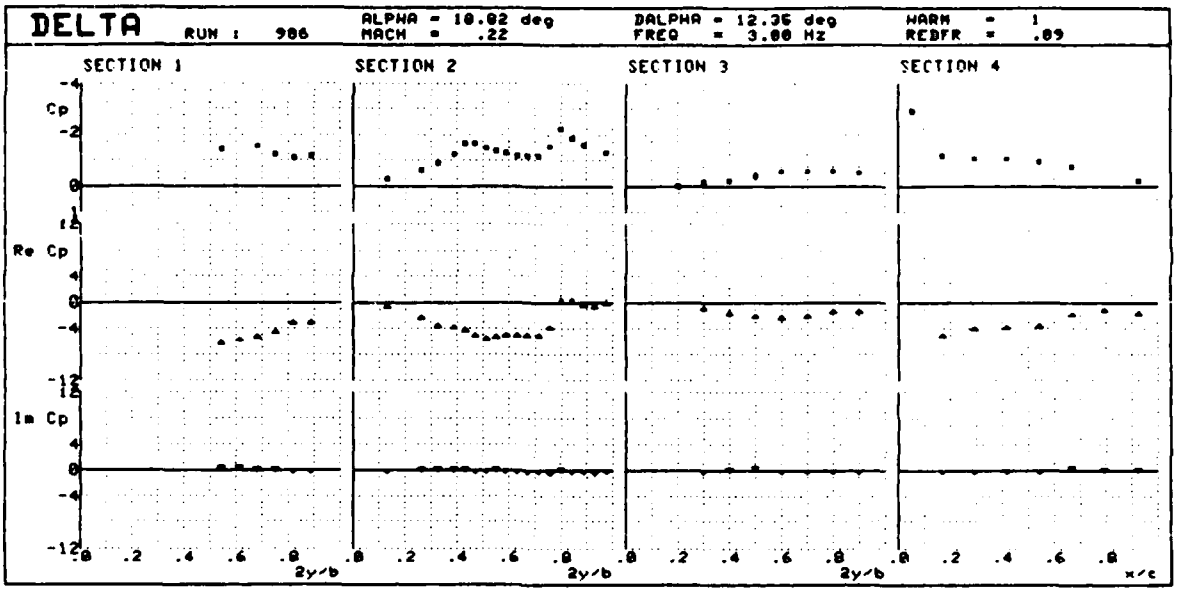

DELTA
RUN : 981
ALPHA = 22.44 deg
MACH = .22
DALPHA = 3.47 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

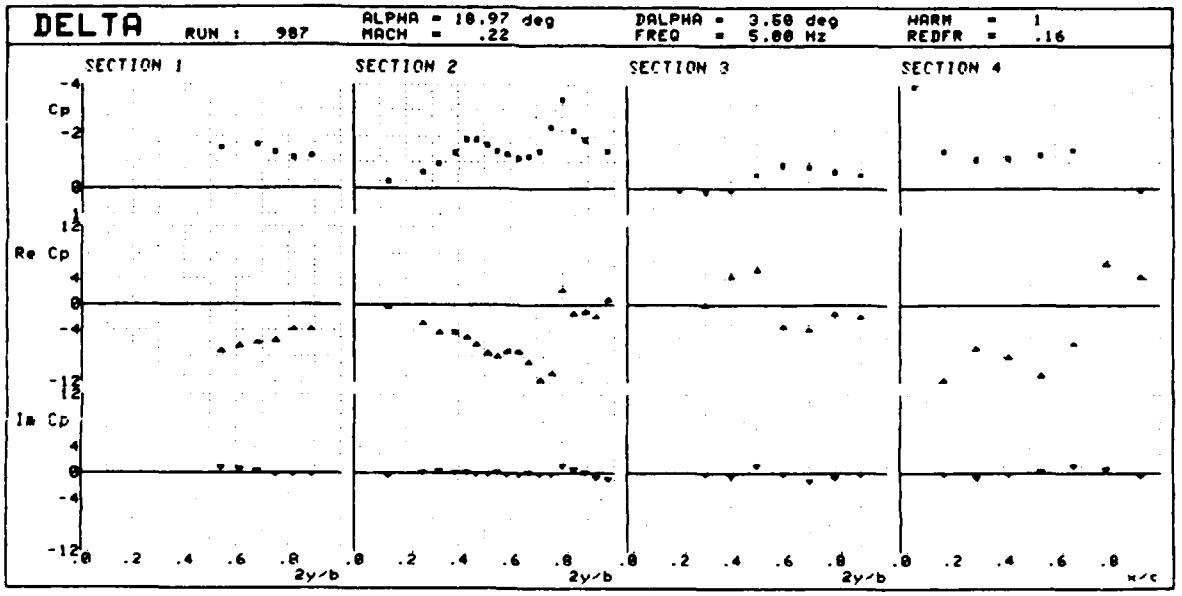

DELTA
RUN : 982
ALPHA = 22.43 deg
MACH = .22
DALPHA = 6.91 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

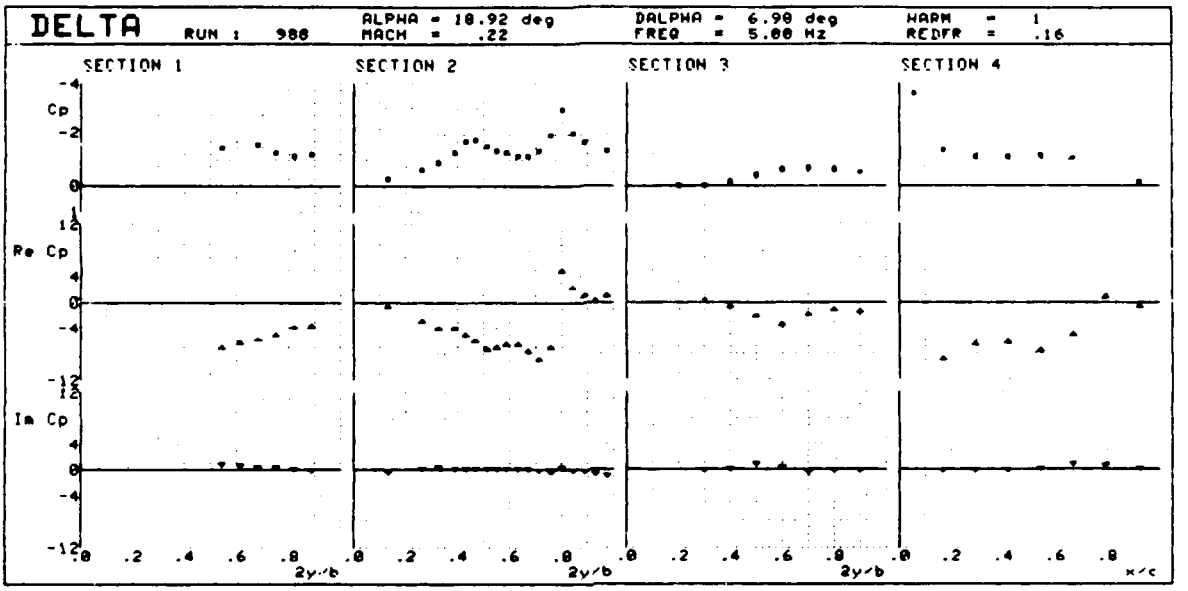

DELTA
RUN : 983
ALPHA = 22.29 deg
MACH = .22
DALPHA = 13.86 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

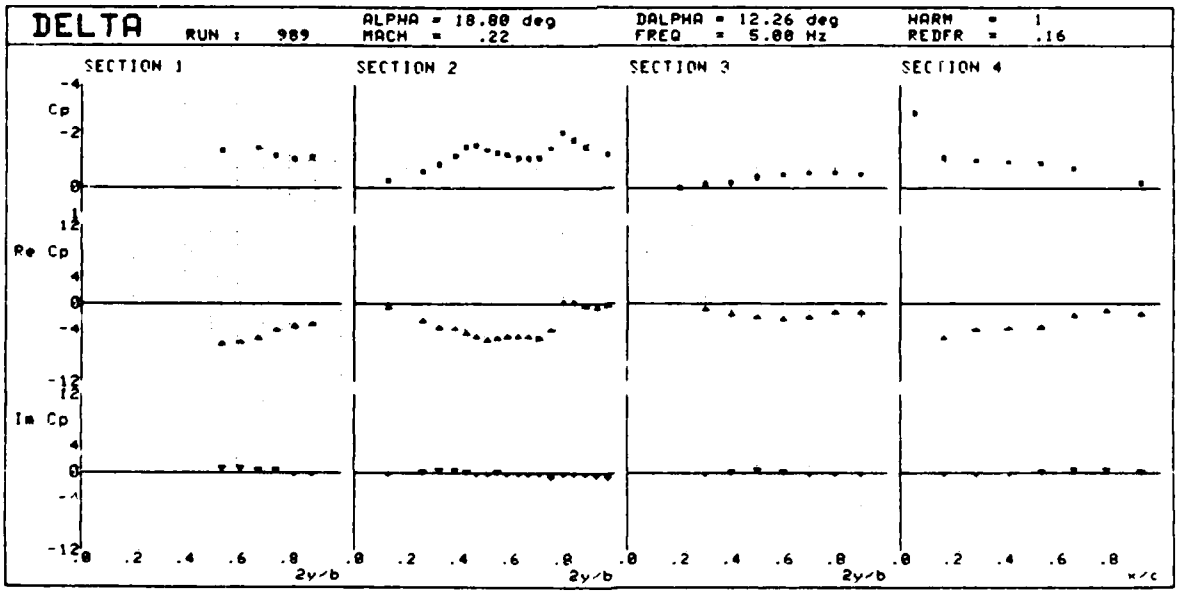

DELTA
RUN : 984
ALPHA = 10.99 deg
MACH = .22
DALPHA = 3.61 deg
FREQ = 3.00 Hz
WARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

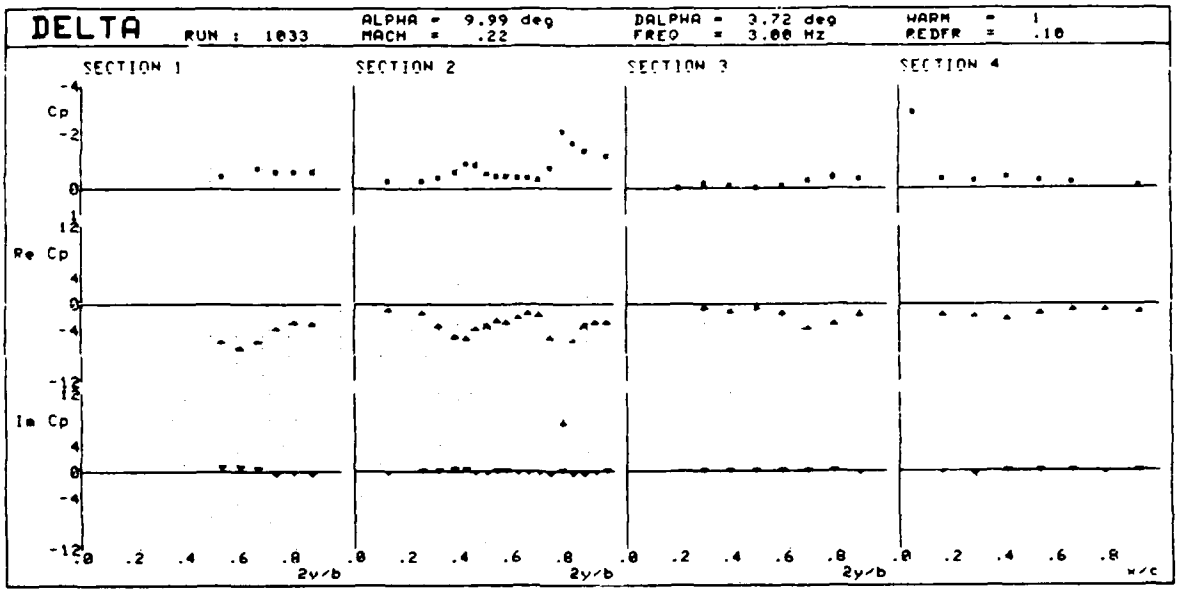

DELTA
RUN : 985
ALPHA = 18.90 deg
MACH = .22
DALPHA = 7.06 deg
FREQ = 3.00 Hz
WARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

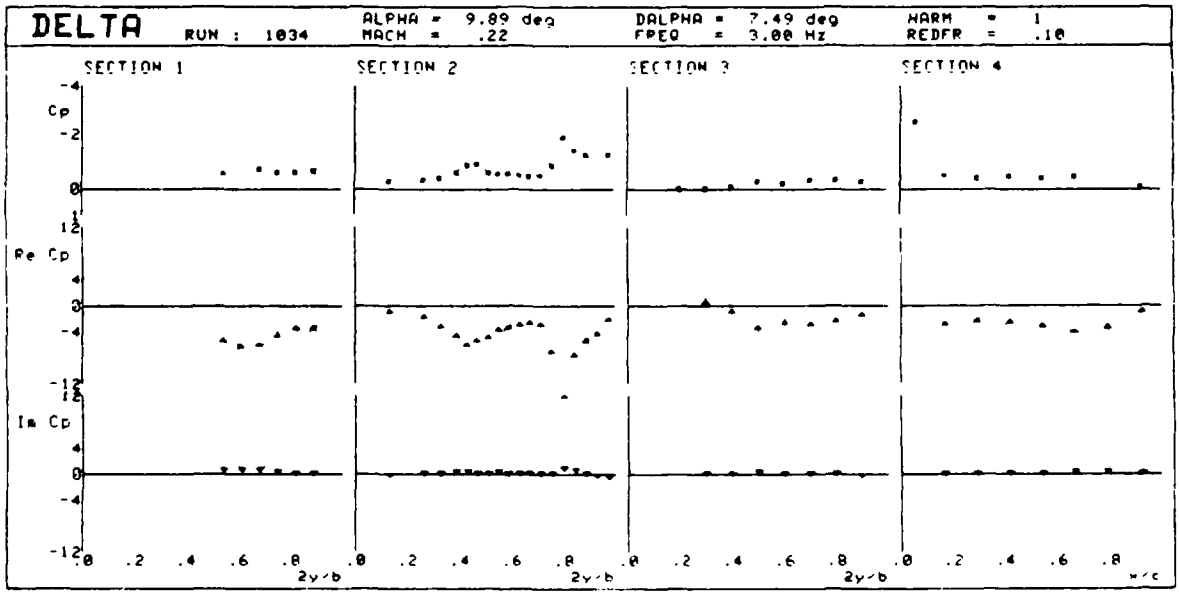

DELTA
RUN : 986
ALPHA = 10.02 deg
MACH = .22
DALPHA = 12.35 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

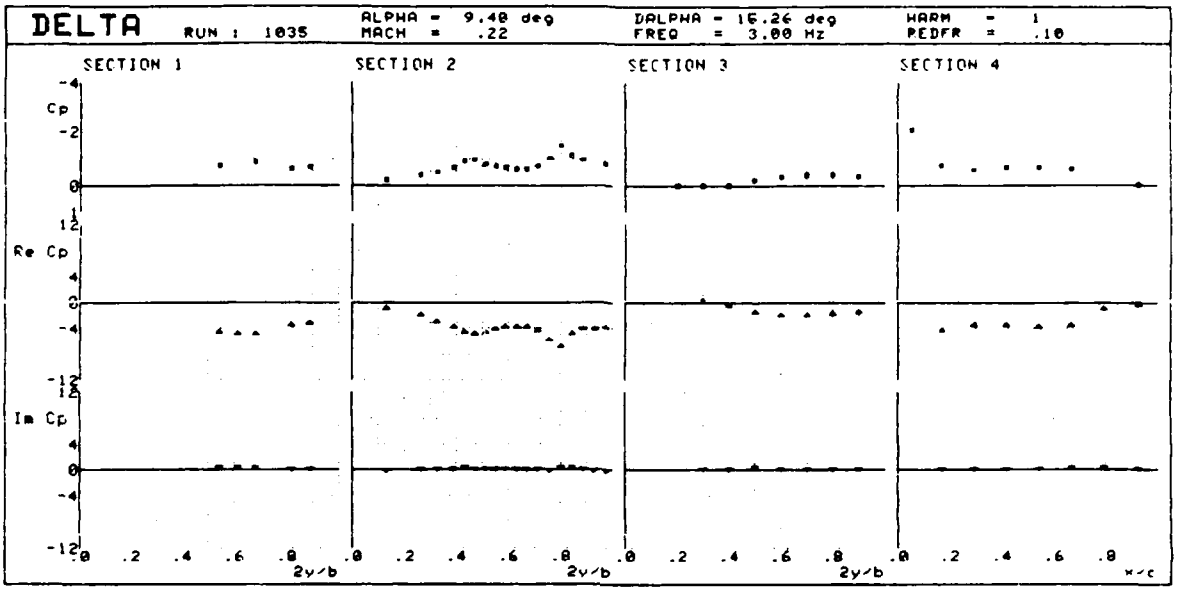

DELTA
RUN : 987
ALPHA = 10.97 deg
MACH = .22
DALPHA = 3.50 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

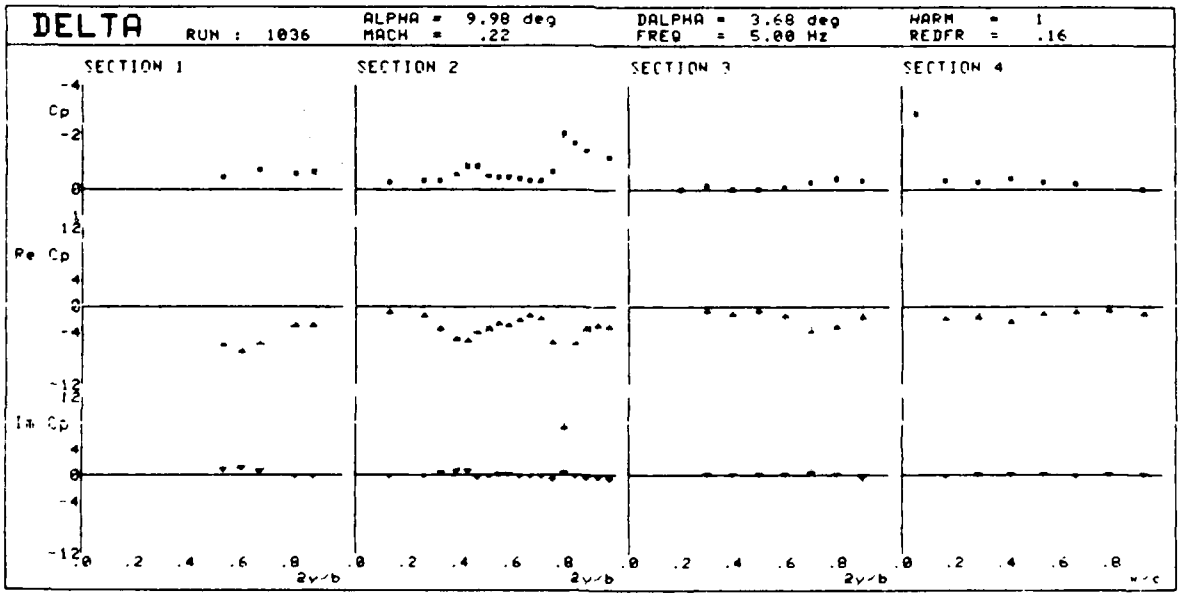

DELTA
RUN : 988
ALPHA = 10.92 deg
MACH = .22
DALPHA = 6.90 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

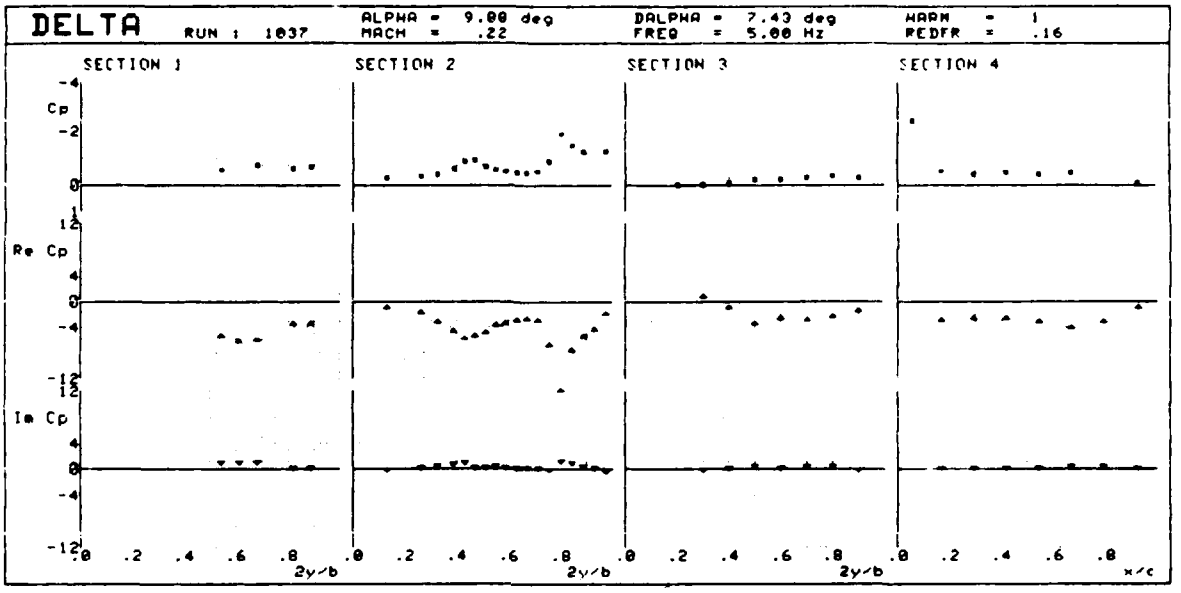

DELTA
RUN : 989
ALPHA = 10.80 deg
MACH = .22
DALPHA = 12.26 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

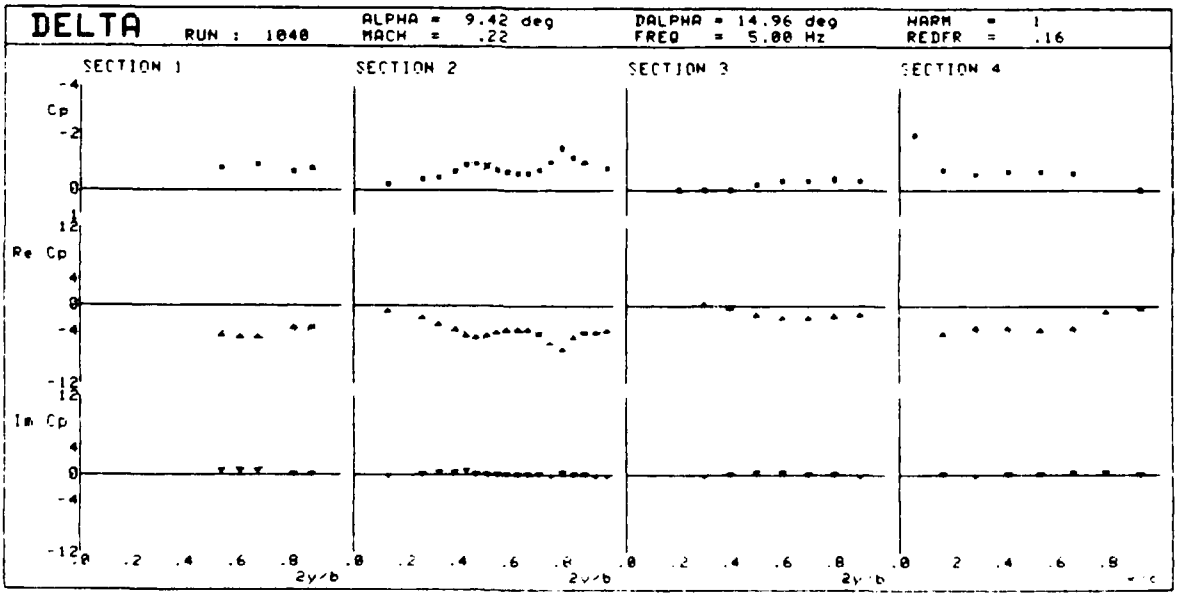

DELTA
RUN : 1033
ALPHA = 9.99 deg
MACH = .22
DALPHA = 3.72 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .10
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

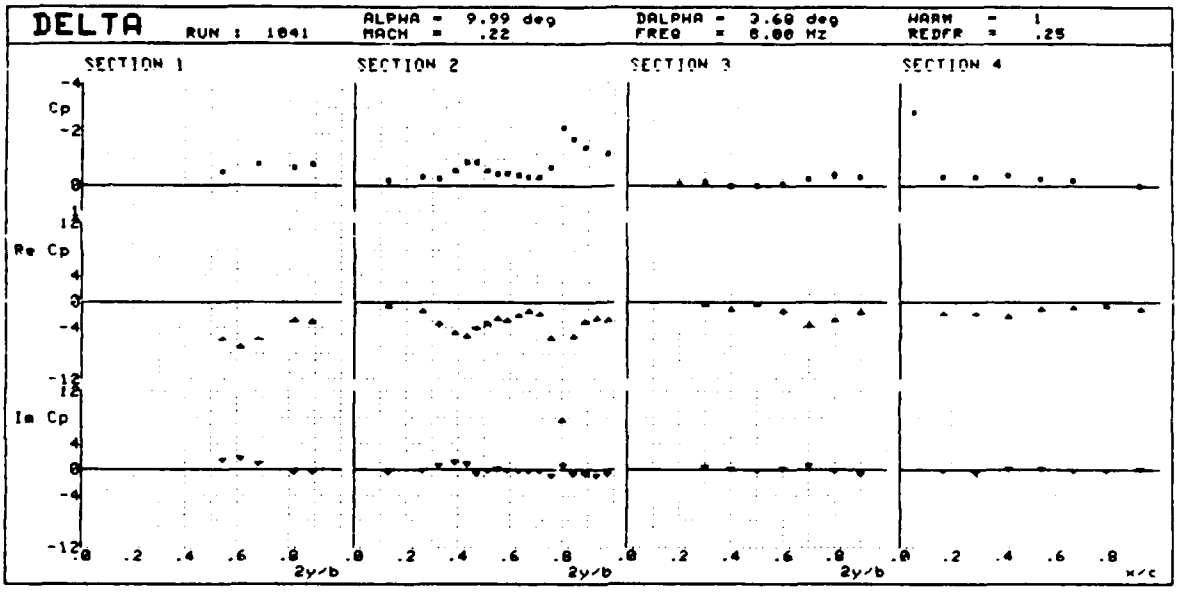

DELTA
RUN : 1034
ALPHA = 9.89 deg
MACH = .22
DALPHA = 7.49 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .10
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

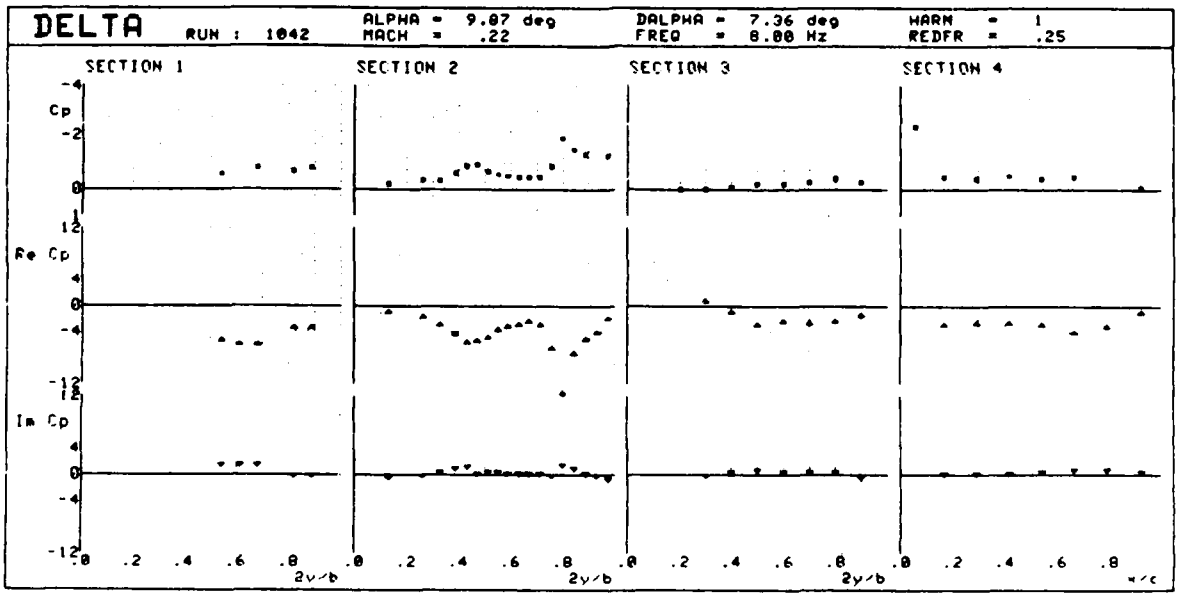

DELTA
RUN : 1035
ALPHA = 9.48 deg
MACH = .22
DALPHA = 15.26 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .10
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

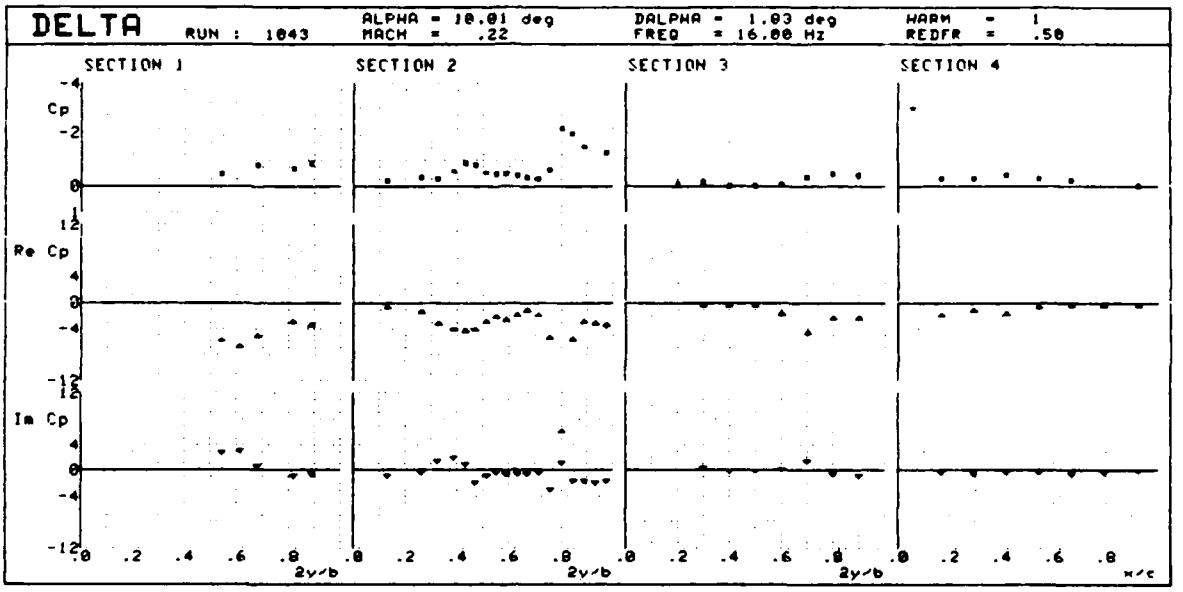

DELTA
RUN : 1036
ALPHA = 9.98 deg
MACH = .22
DALPHA = 3.68 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

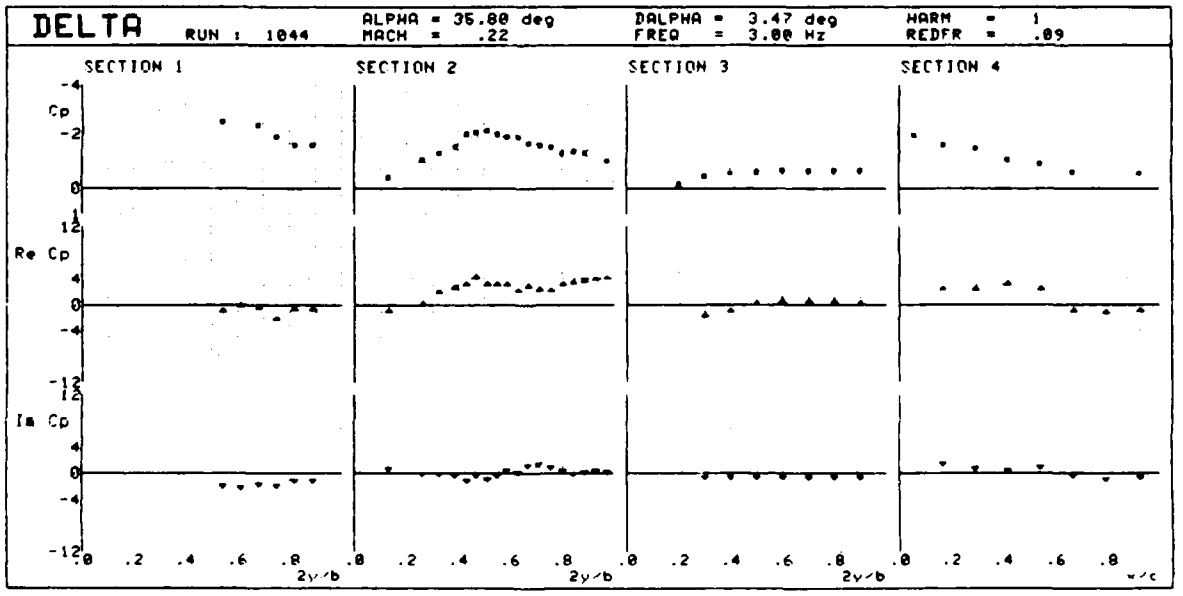

DELTA
RUN : 1037
ALPHA = 9.00 deg
MACH = .22
DALPHA = 7.43 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

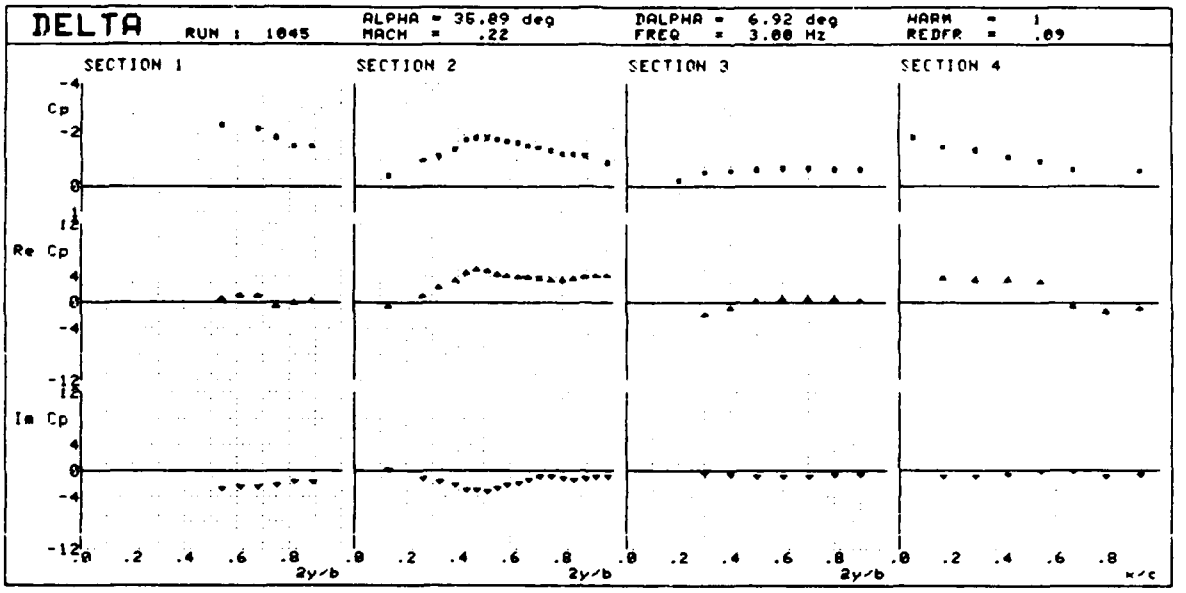

DELTA
RUN : 1048
ALPHA = 9.42 deg
MACH = .22
DALPHA = 14.96 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

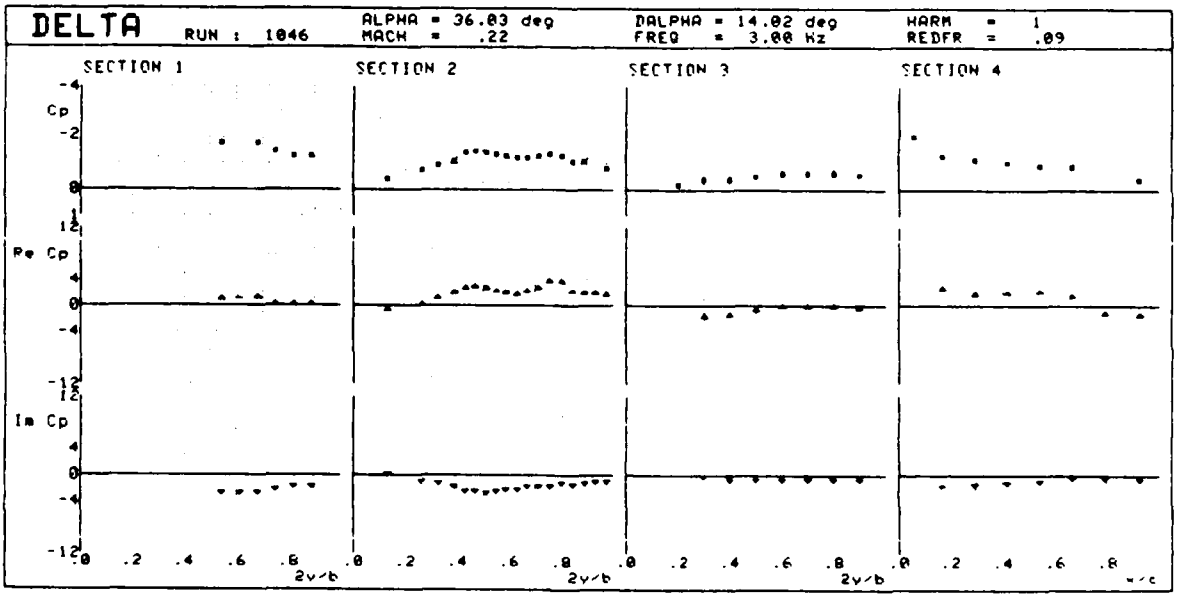

DELTA
RUN : 1041
ALPHA = 9.99 deg
MACH = .22
DALPHA = 3.60 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

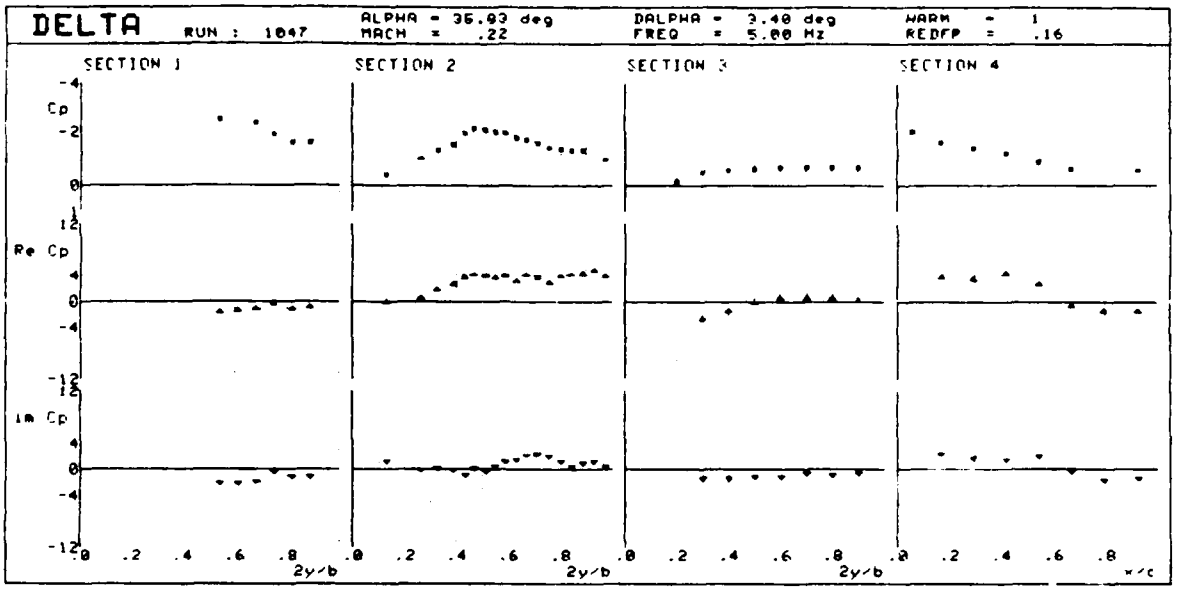

DELTA
RUN : 1042
ALPHA = 9.07 deg
MACH = .22
DALPHA = 7.36 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

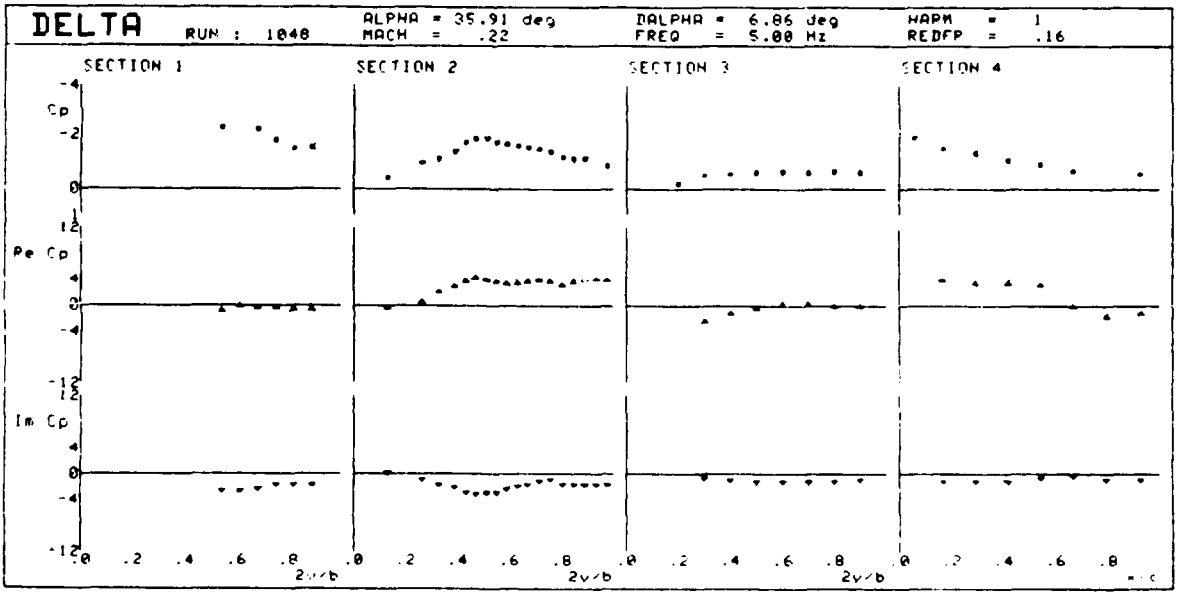

DELTA
RUN : 1043
ALPHA = 10.01 deg
MACH = .22
DALPHA = 1.03 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

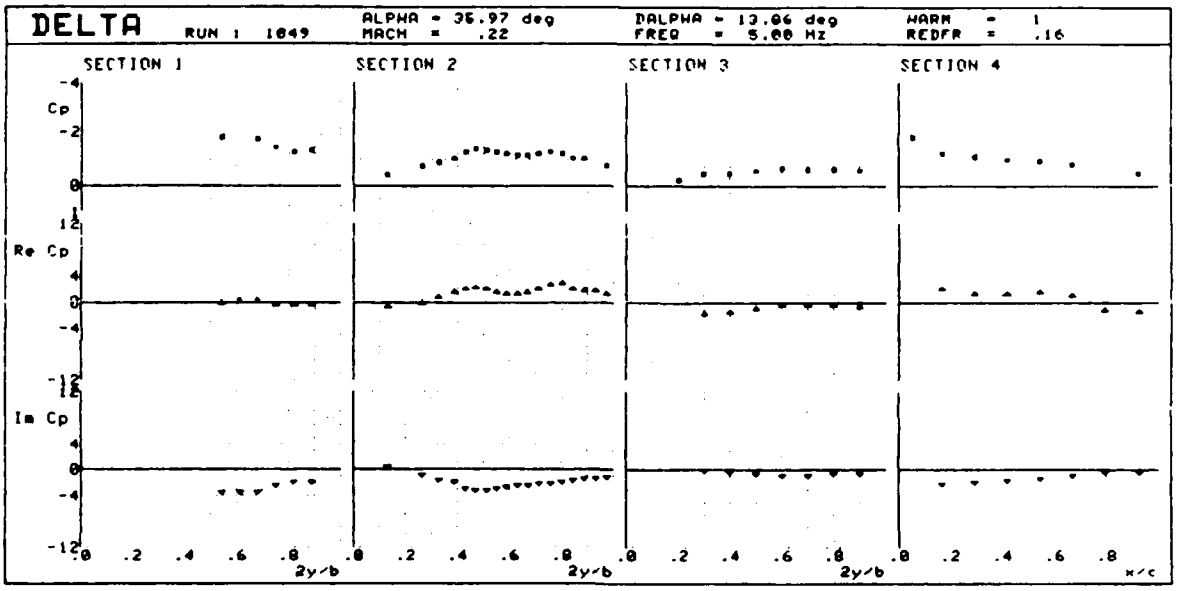

DELTA
RUN : 1044
ALPHA = 35.88 deg
MACH = .22
DALPHA = 3.47 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

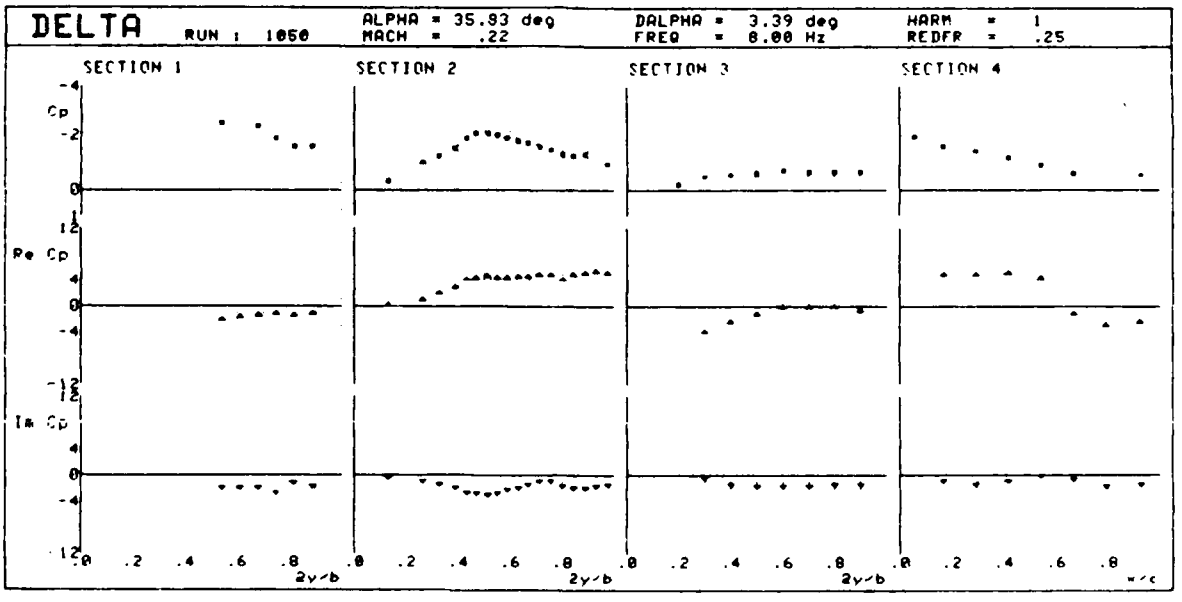

DELTA
RUN : 1045
ALPHA = 36.09 deg
MACH = .22
DALPHA = 6.92 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

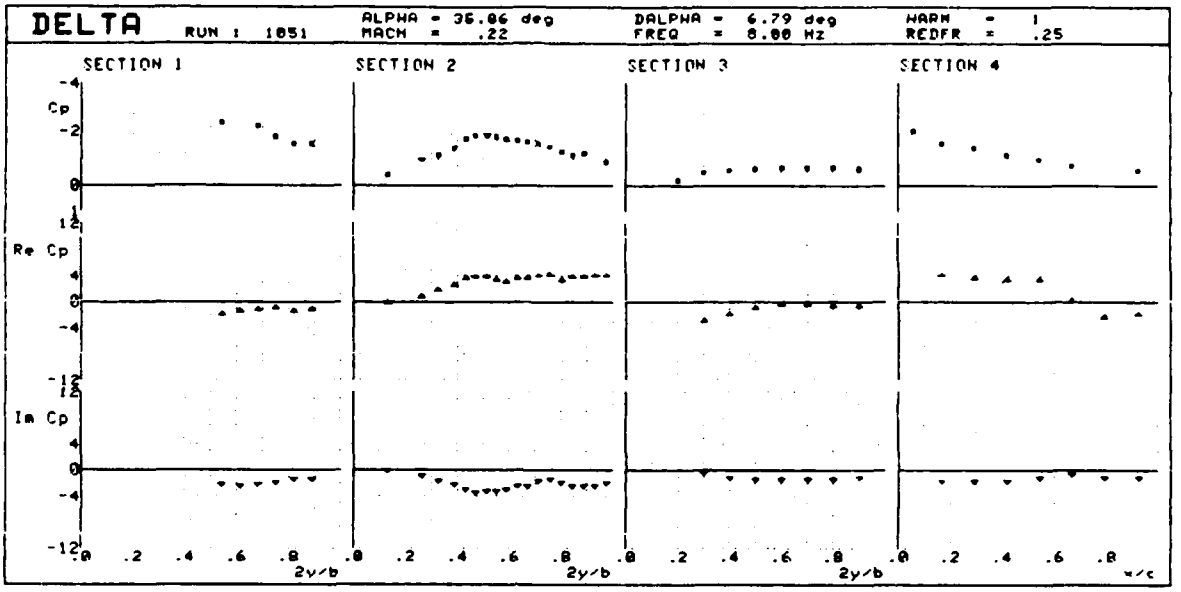

DELTA
RUN : 1046
ALPHA = 36.03 deg
MACH = .22
DALPHA = 14.02 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

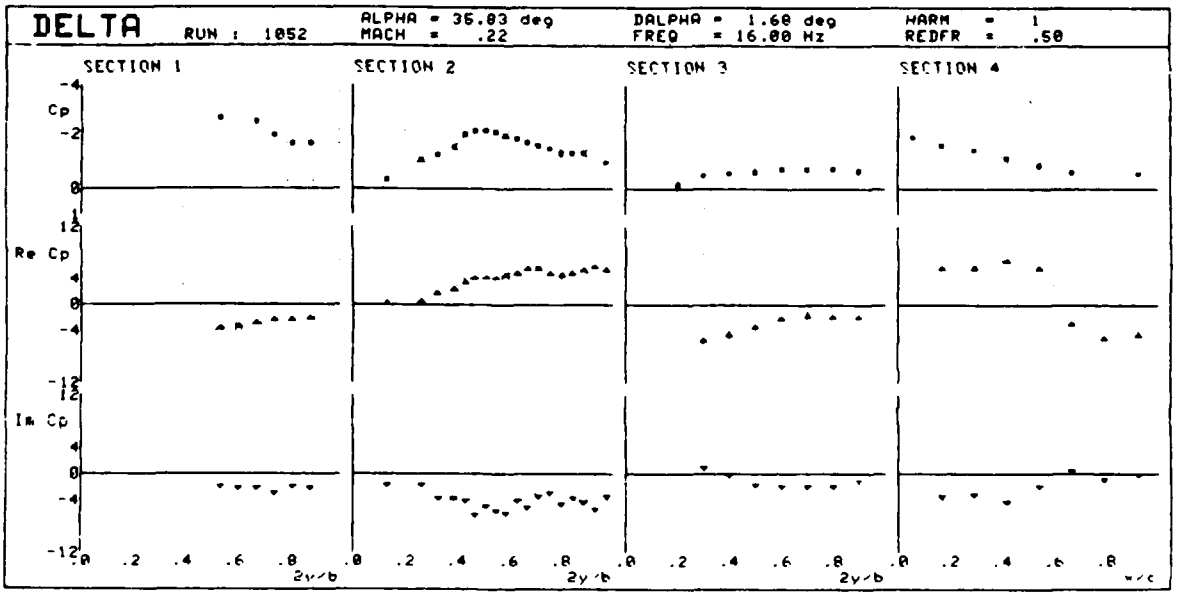

DELTA
RUN : 1047
ALPHA = 35.93 deg
MACH = .22
DALPHA = 3.40 deg
FREQ = 5.00 Hz
HARM = 1
REDFP = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

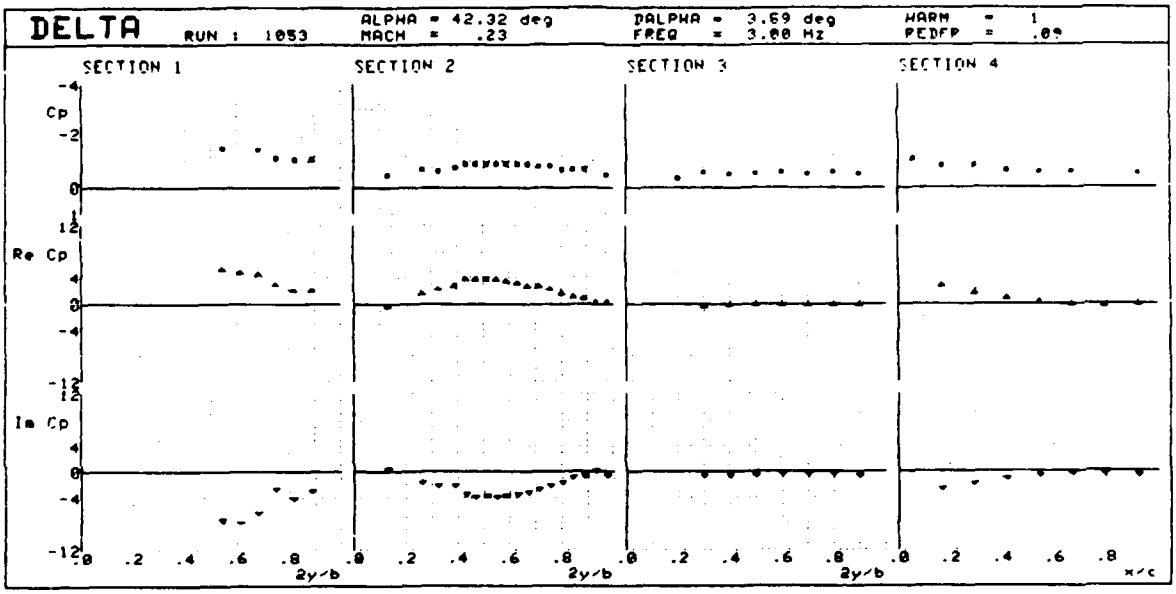

DELTA
RUN : 1048
ALPHA = 35.91 deg
MACH = .22
DALPHA = 6.86 deg
FREQ = 5.00 Hz
HARM = 1
REDFP = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

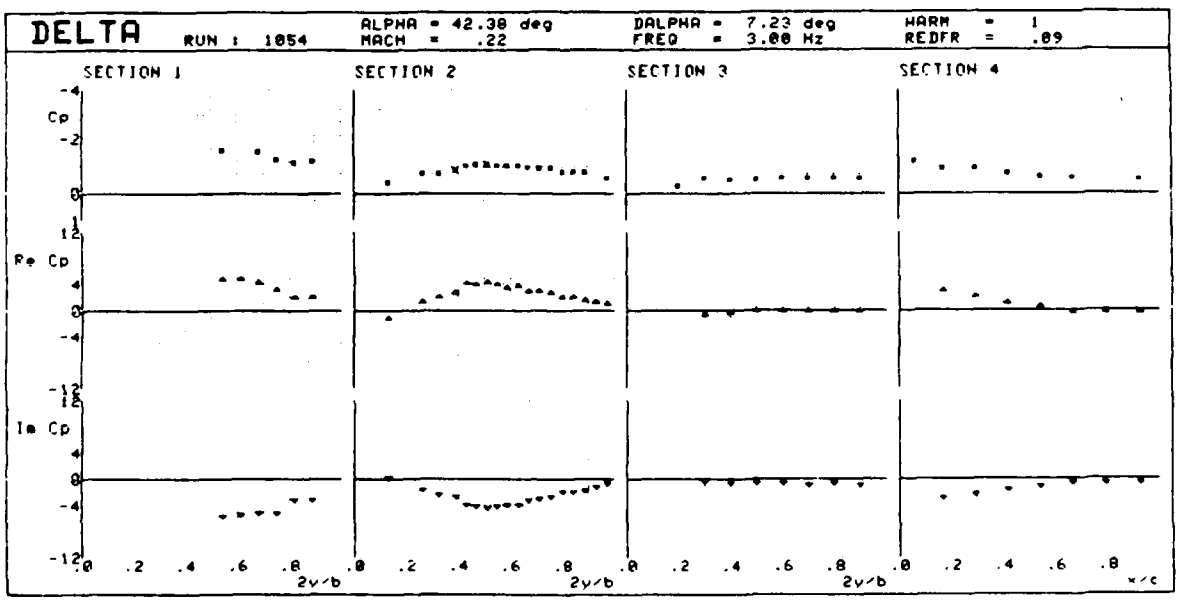

DELTA
RUN : 1049
ALPHA = 35.97 deg
MACH = .22
DALPHA = 13.06 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .16
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

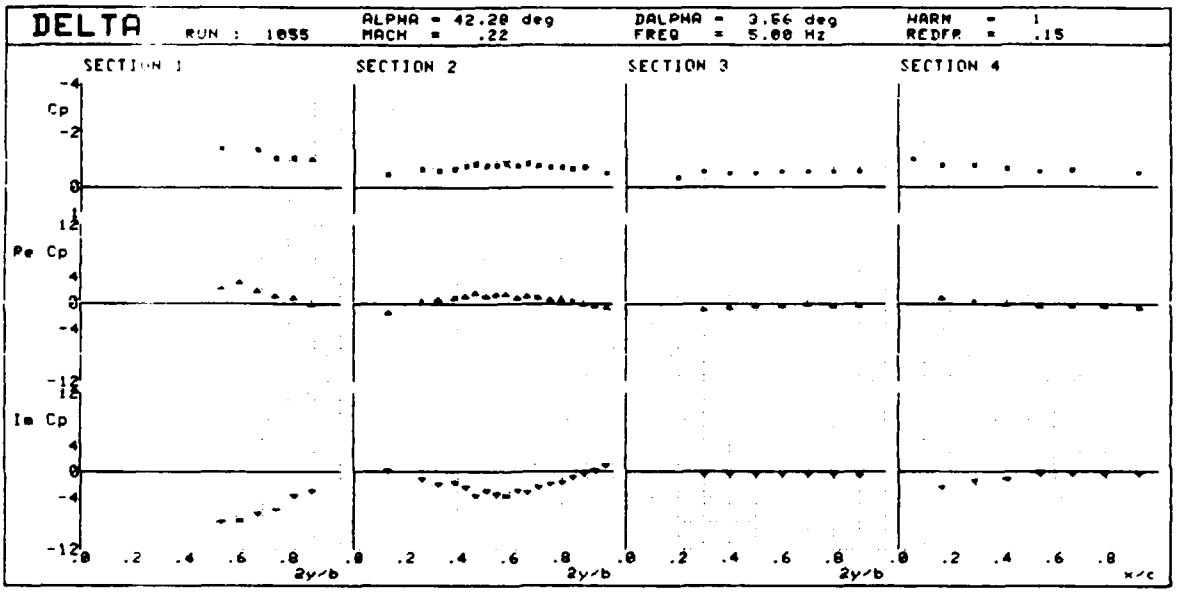

DELTA
RUN : 1050
ALPHA = 35.93 deg
MACH = .22
DALPHA = 3.39 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

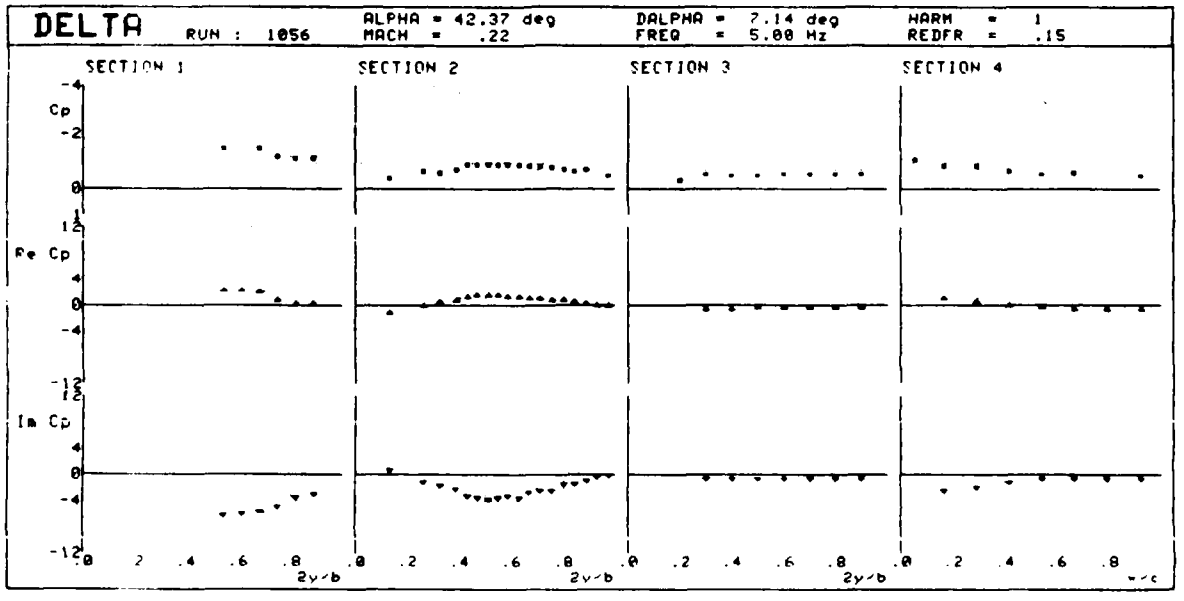

DELTA
RUN : 1051
ALPHA = 35.86 deg
MACH = .22
DALPHA = 6.79 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

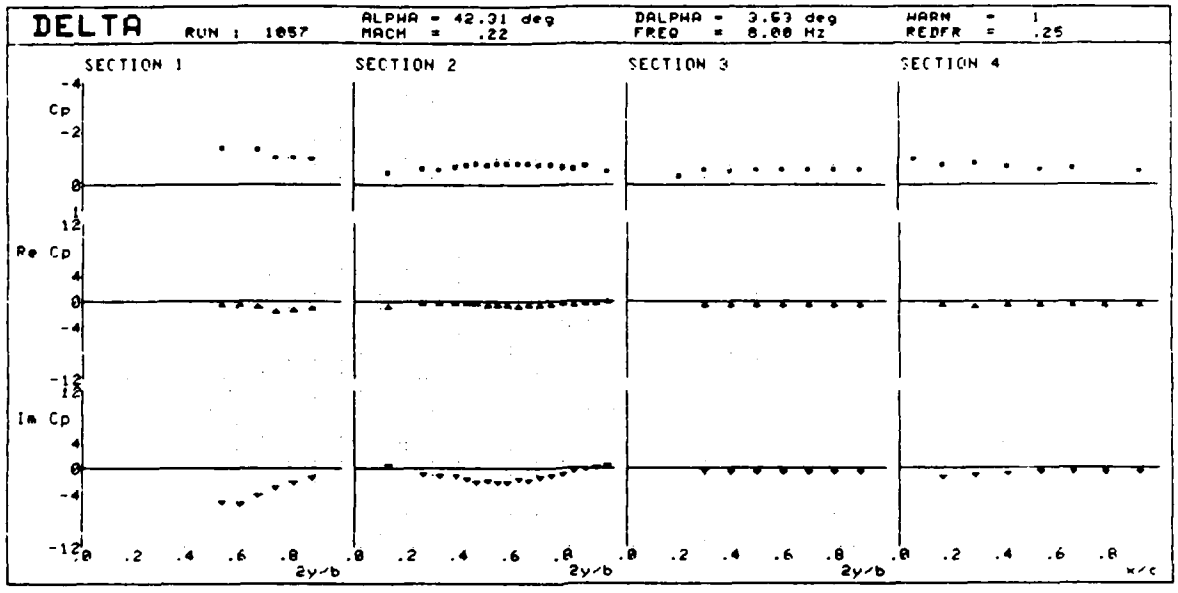

DELTA
RUN : 1052
ALPHA = 35.83 deg
MACH = .22
DALPHA = 1.60 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

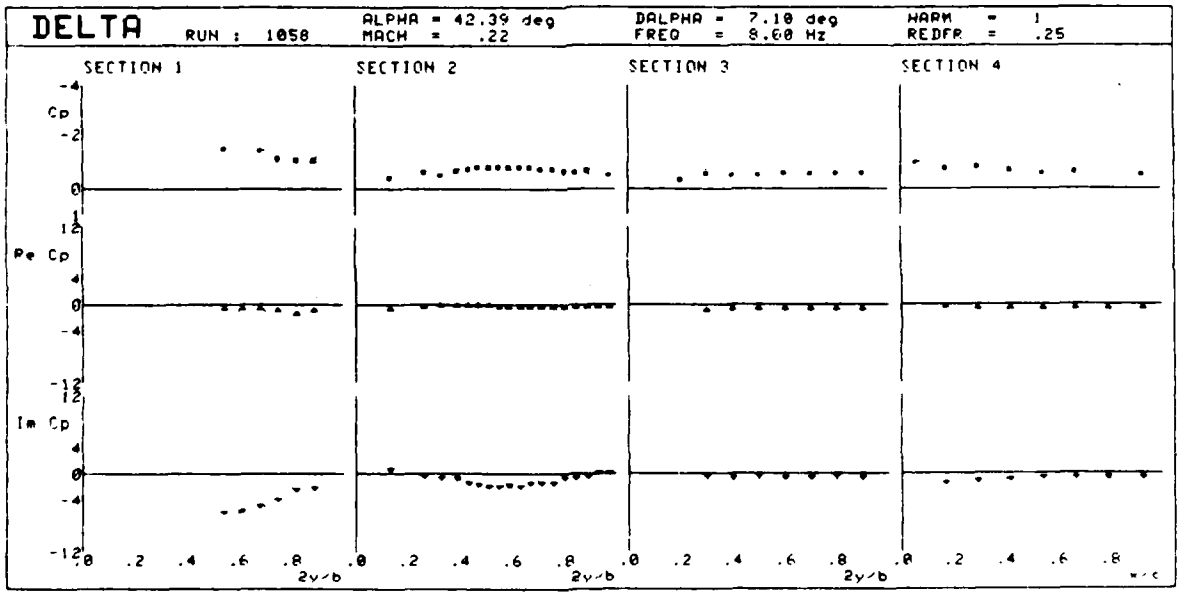

DELTA
RUN : 1053
ALPHA = 42.32 deg
MACH = .23
DALPHA = 3.69 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

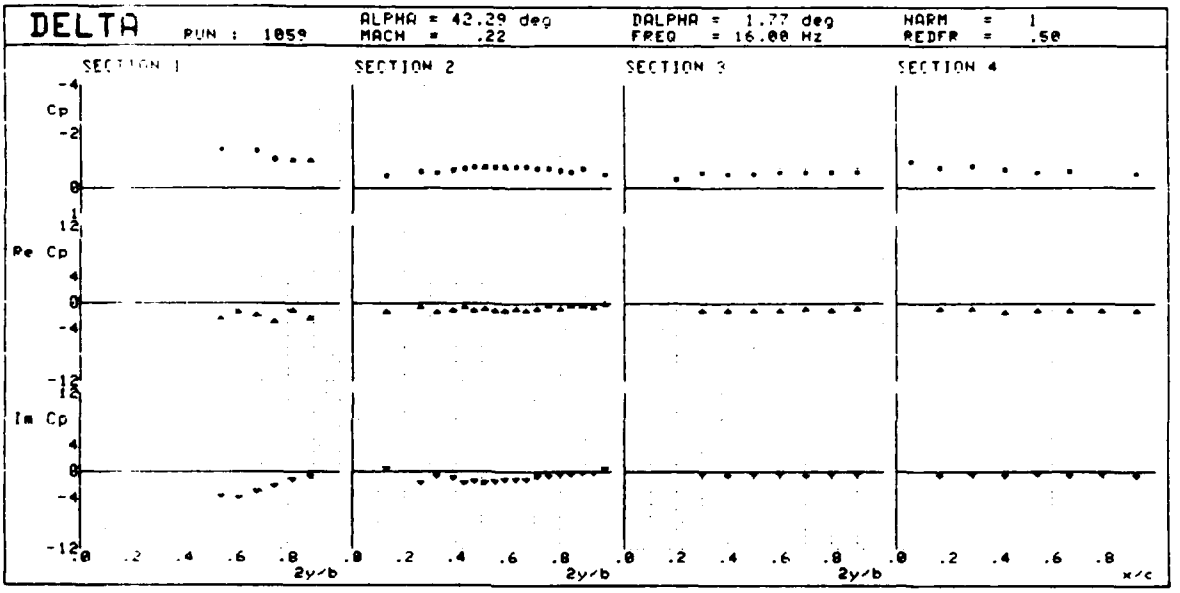

DELTA
RUN : 1054
ALPHA = 42.38 deg
MACH = .22
DALPHA = 7.23 deg
FREQ = 3.00 Hz
HARM = 1
REDFR = .09
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c


DELTA
RUN : 1055
ALPHA = 42.20 deg
MACH = .22
DALPHA = 3.56 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c


DELTA
RUN : 1056
ALPHA = 42.37 deg
MACH = .22
DALPHA = 2.14 deg
FREQ = 5.00 Hz
HARM = 1
REDFR = .15
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c


DELTA
RUN : 1057
ALPHA = 42.31 deg
MACH = .22
DALPHA = 3.69 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c


DELTA
RUN : 1058
ALPHA = 42.39 deg
MACH = .22
DALPHA = 7.10 deg
FREQ = 8.00 Hz
HARM = 1
REDFR = .25
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c


DELTA
RUN : 1059
ALPHA = 42.29 deg
MACH = .22
DALPHA = 1.77 deg
FREQ = 16.00 Hz
HARM = 1
REDFR = .50
SECTION 1
SECTION 2
SECTION 3
SECTION 4
Cp
Re Cp
Im Cp
2y/b
x/c

APPENDIX B

PLOTS OF THE STEADY AND ZEROTH AND FIRST ORDER HARMONIC COMPONENTS OF THE UNSTEADY OVERALL LOADS

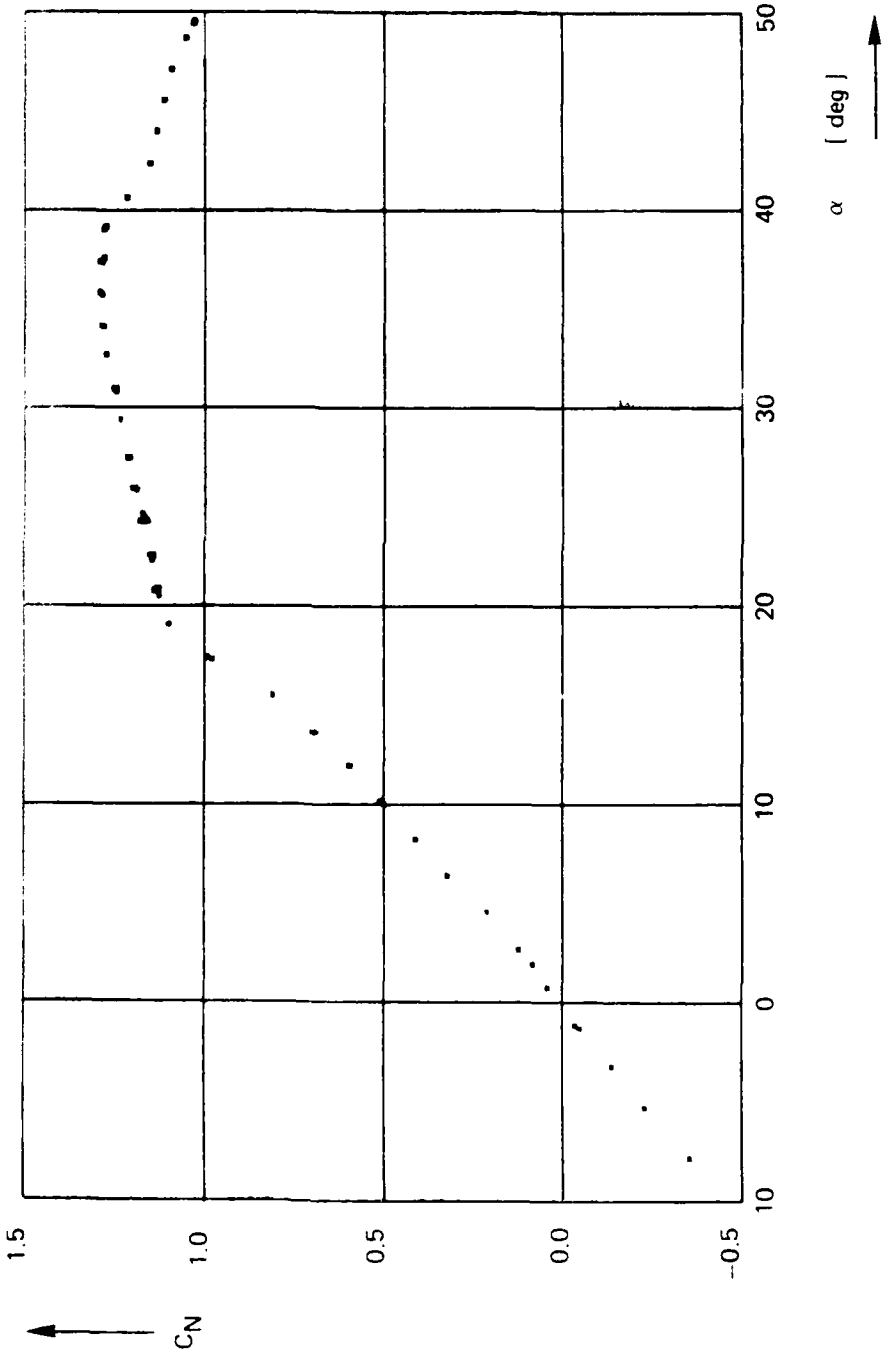


Fig. B1 Steady normal force coefficient vs. incidence
(β = 0 deg, V ≈ 80 m/s)

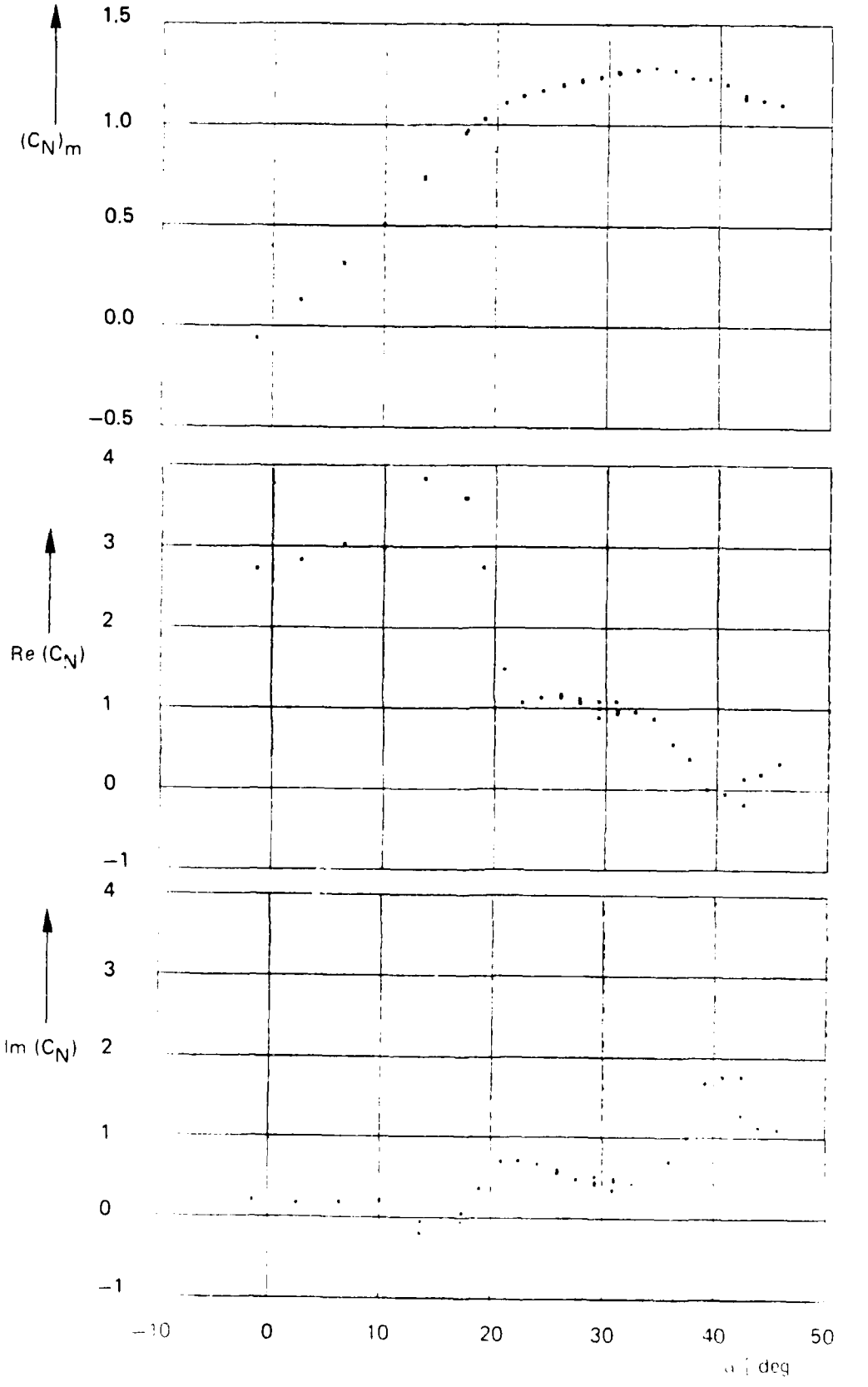


Fig B2 Zeroth and first order harmonic components of unsteady normal force coefficient ($d \approx 3.5$ deg, $f = 3$ Hz, $\gamma = 0$ deg, $V \approx 80$ m/s)

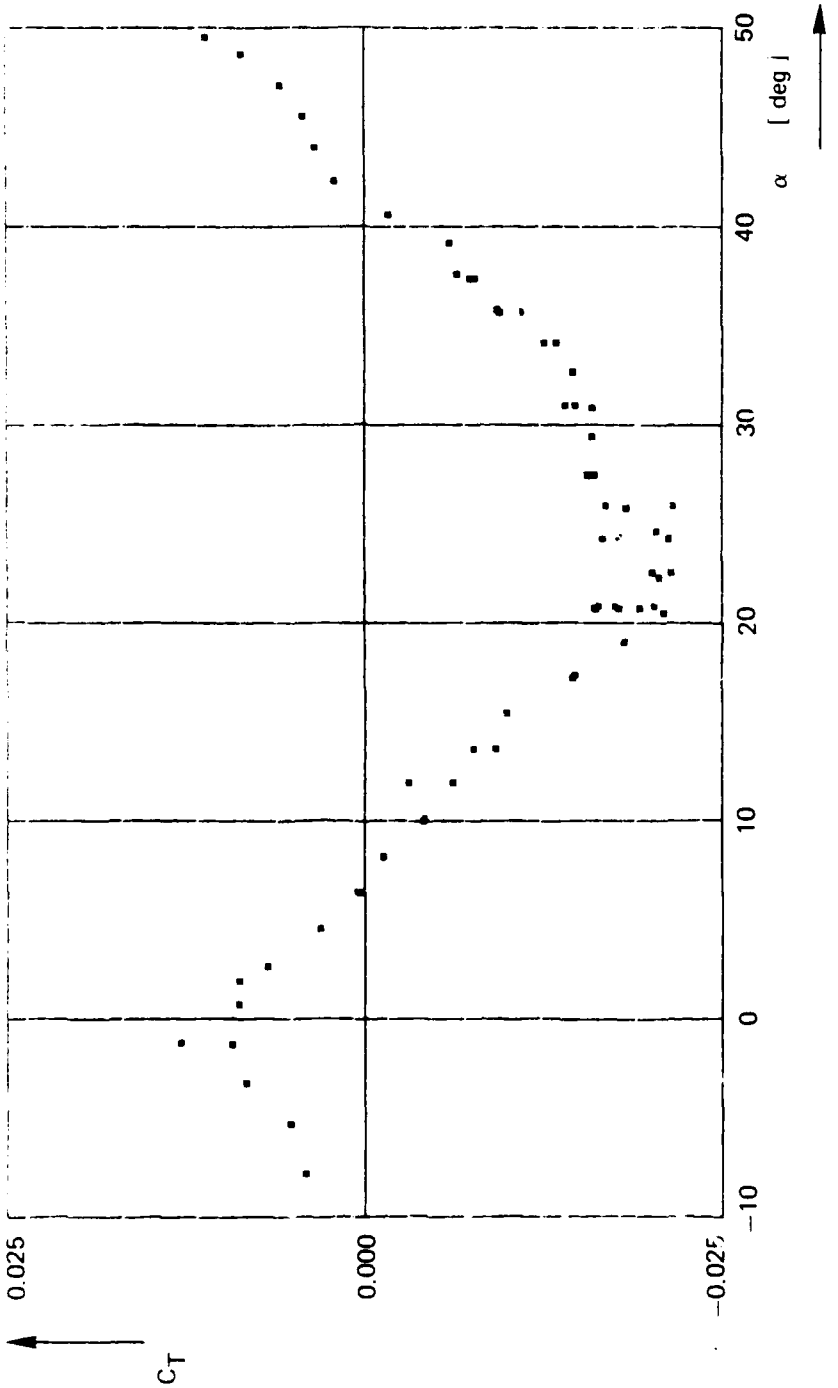


Fig. B3 Steady tangential force coefficient vs. incidence
(β = 0 deg, V ≈ 80 m/s)

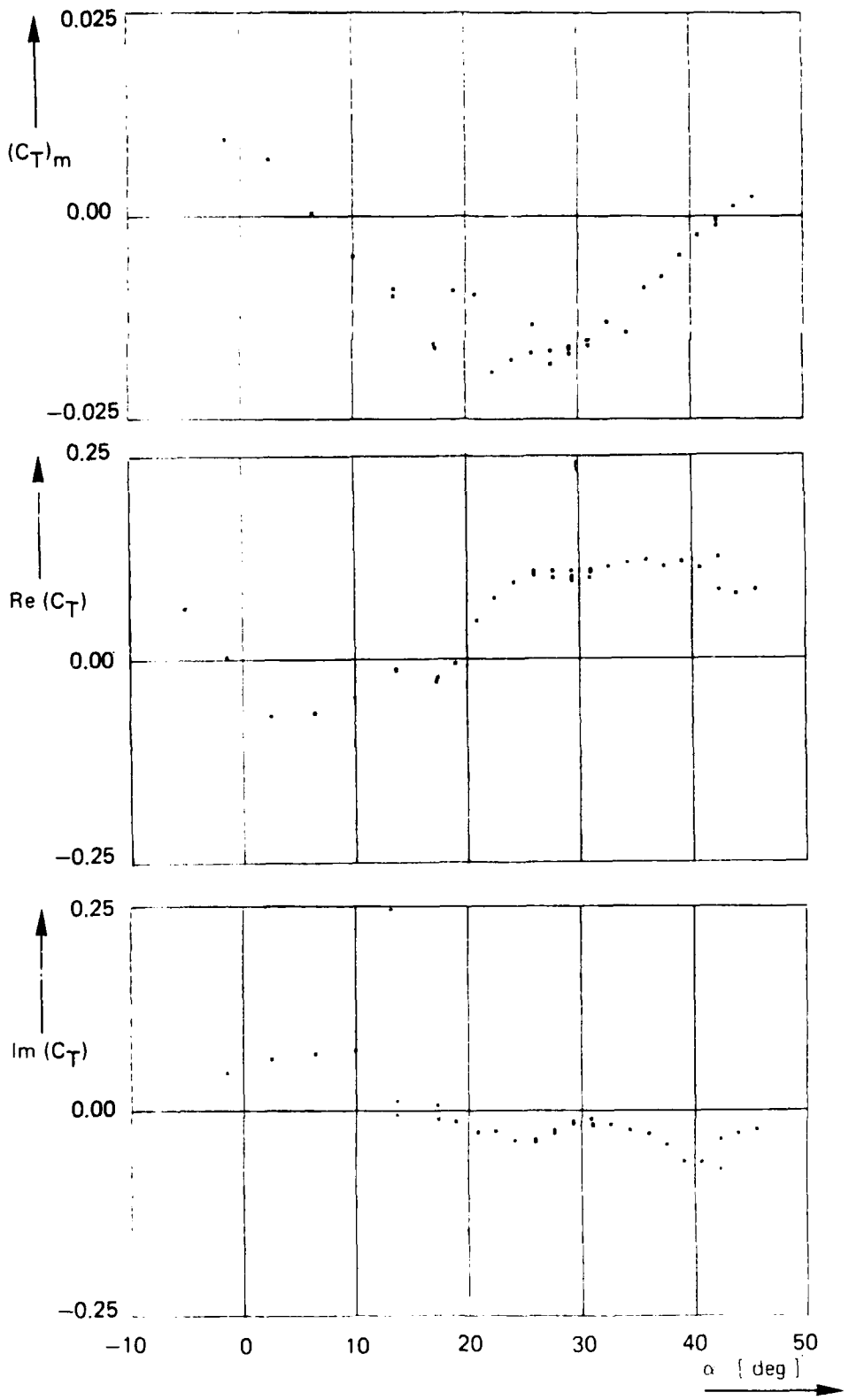


Fig. B4 Zeroth and first order harmonic components of unsteady tangential force coefficient ($d\alpha \approx 3.5$ deg, f = 3 Hz, β = 0 deg, V ≈ 80 m s)

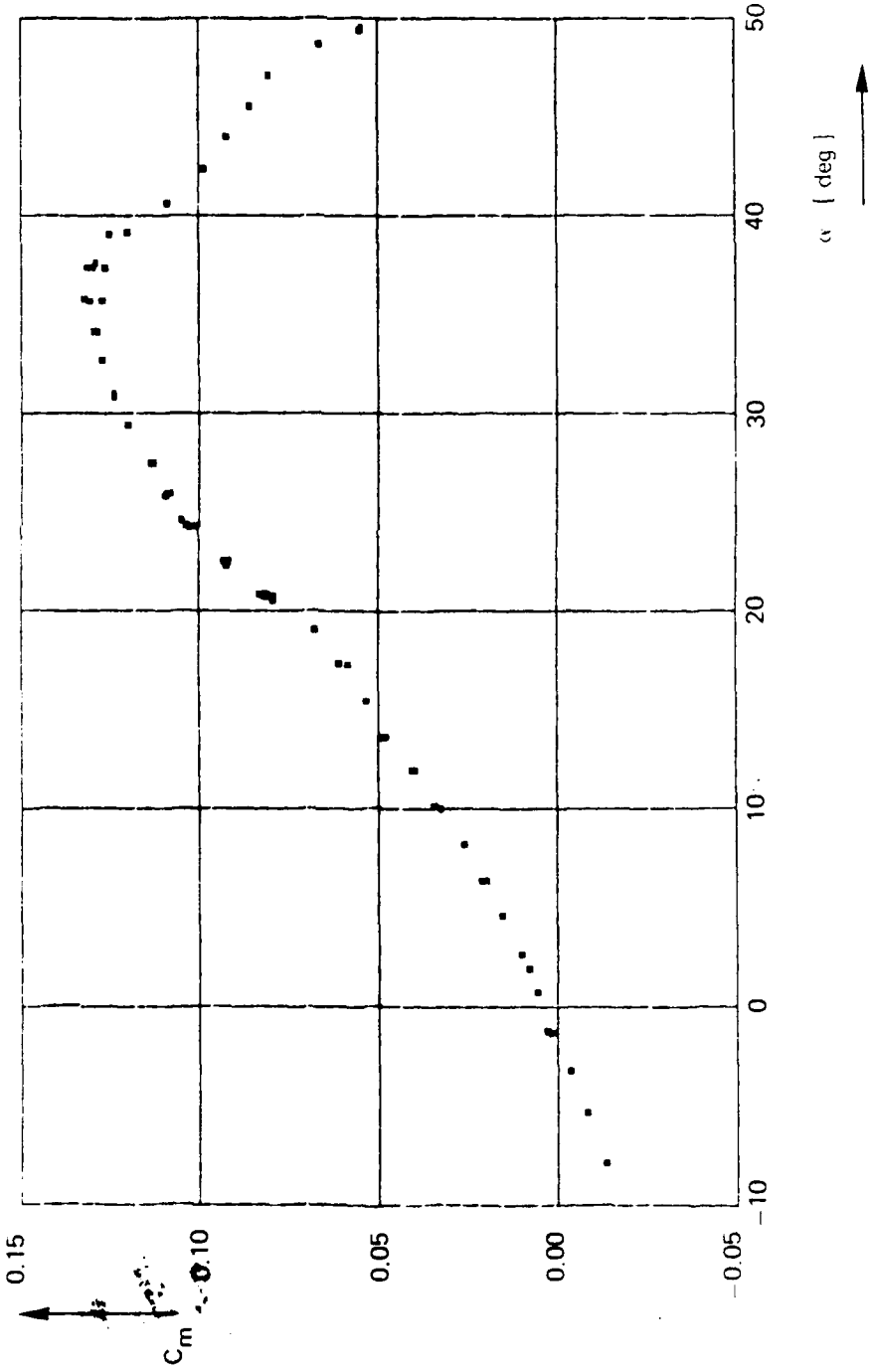


Fig. B5 Steady pitching moment coefficient vs. incidence
($\beta = 0$ deg, $V \approx 80$ m/s)

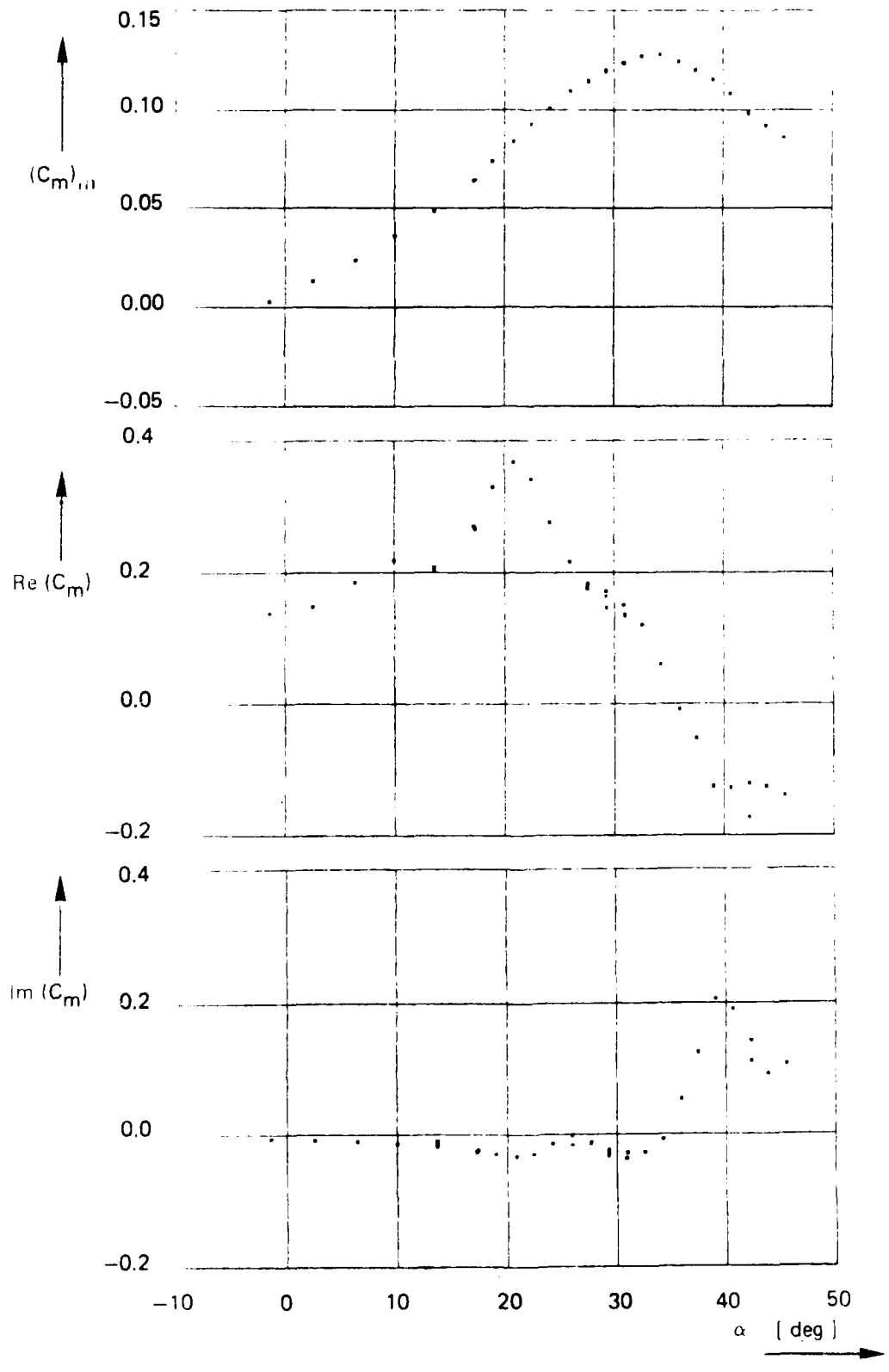


Fig. B6 Zeroth and first order harmonic components of unsteady pitching moment coefficient ($d\alpha \approx 3.5$ deg, $f = 3$ Hz, $\beta = 0$ deg, $V \approx 80$ m/s)

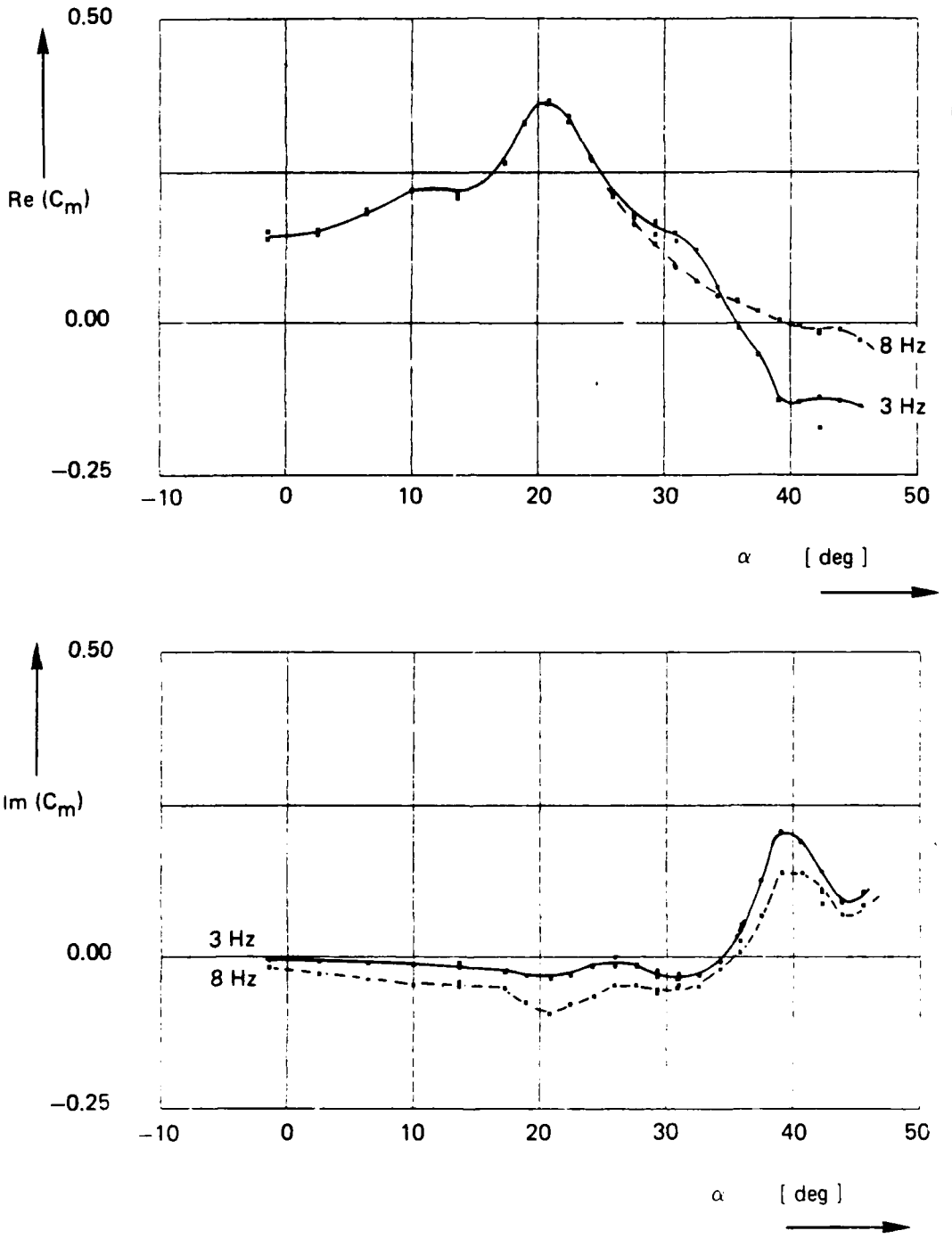


Fig. B7 First order harmonic components of unsteady pitching moment coefficients at 3 and 8 Hz ($d\alpha \approx 3.5$ deg, $\bar{\alpha} = 0$ deg, $V \approx 80$ m s)

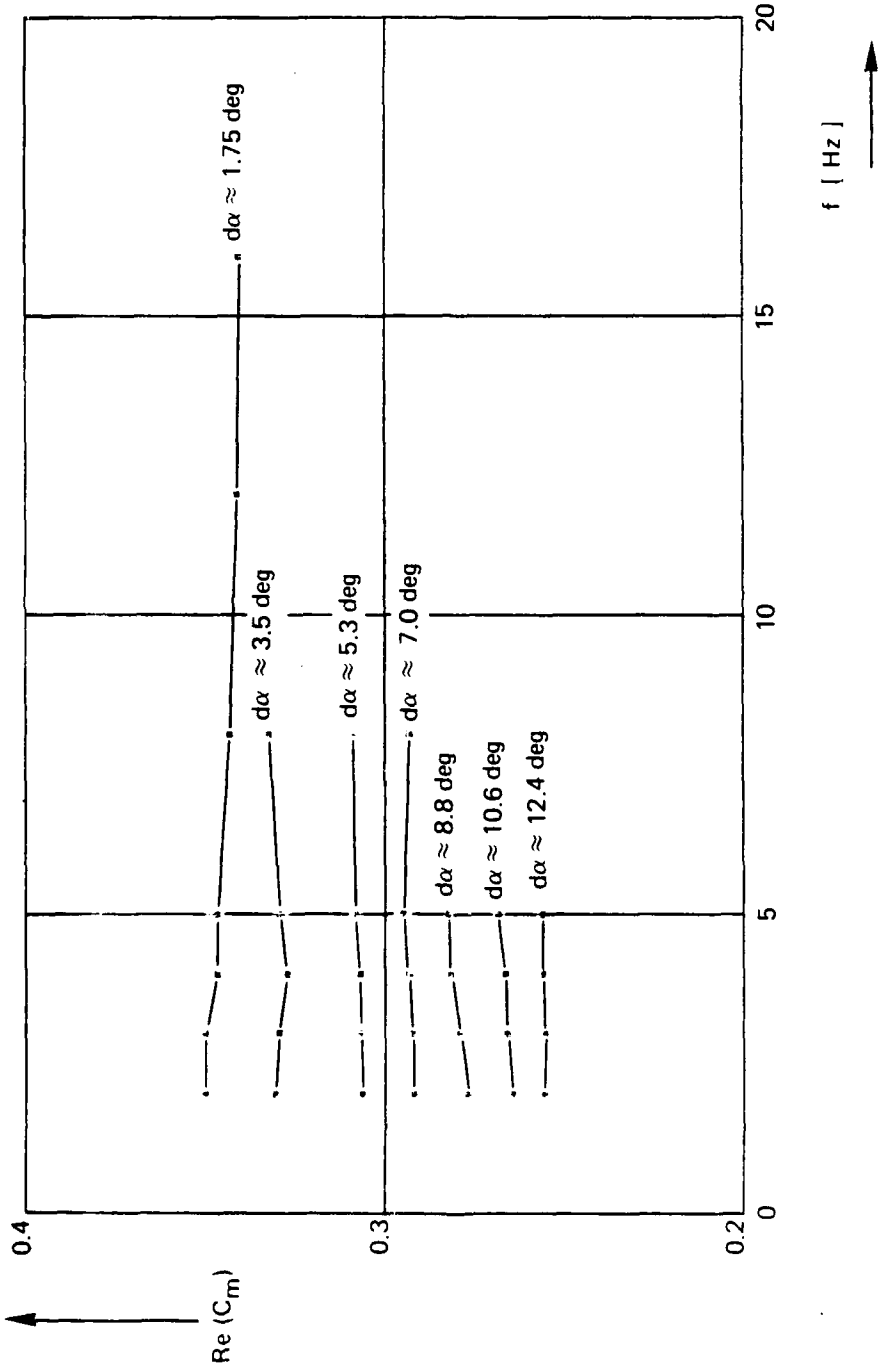


Fig. B8 Real part of first order harmonic component of unsteady pitching moment coefficient vs. frequency ($\alpha \approx 18.9$ deg, $\beta = 0$ deg, $V = 80$ m/s)

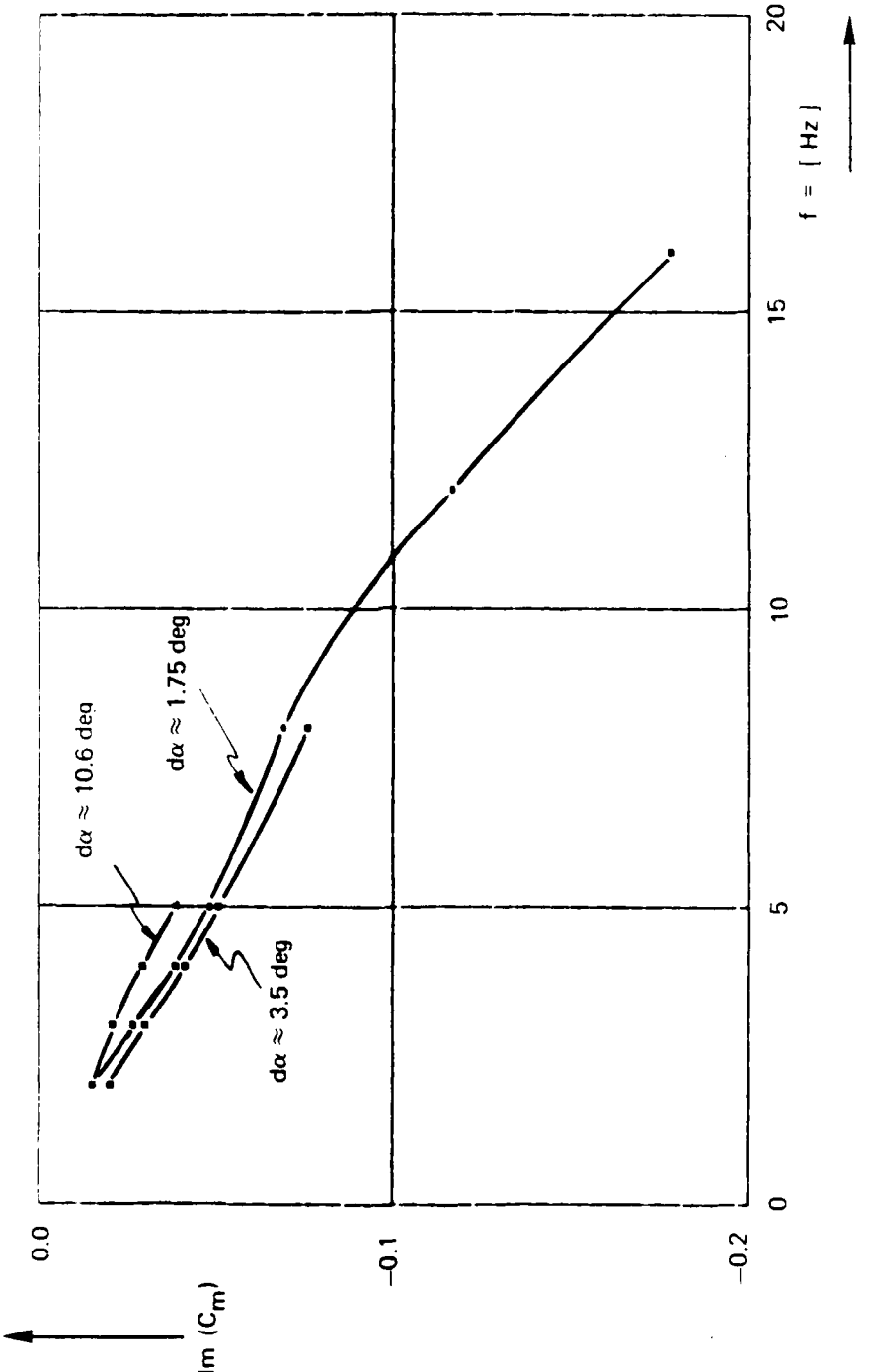


Fig. B9 Imaginary part of first order harmonic components of the unsteady pitching moment coefficient vs. frequency ($\alpha \approx 18.9$ deg, $\beta = 0$ deg, $V \approx 80$ m/s)

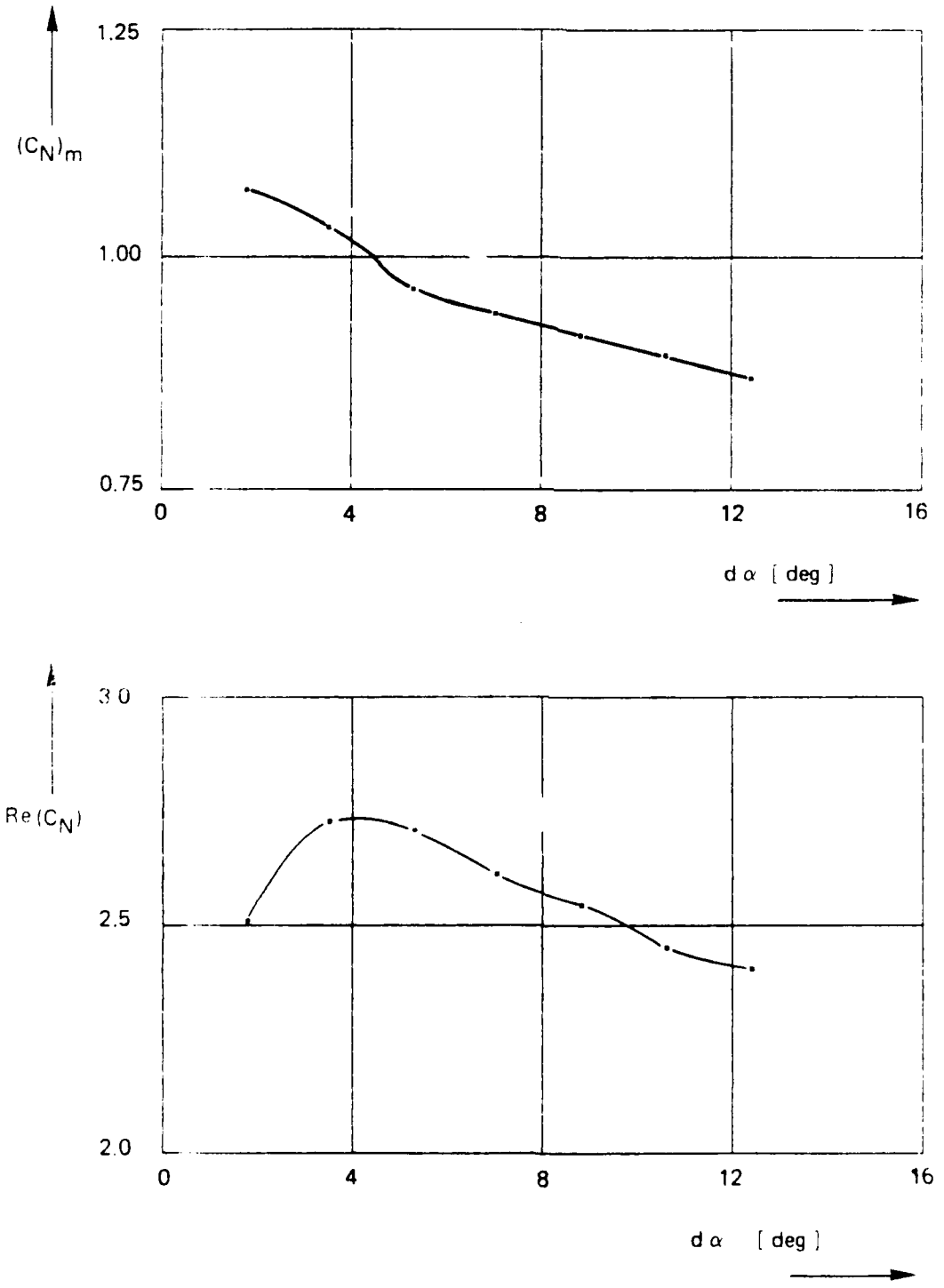


Fig. B10 Zeroth order harmonic component and real part of first order harmonic component of unsteady normal force coefficient vs. amplitude (α_0 = 18.9 deg, f = 3 Hz, β = 0 deg, V ≈ 80 m/s)

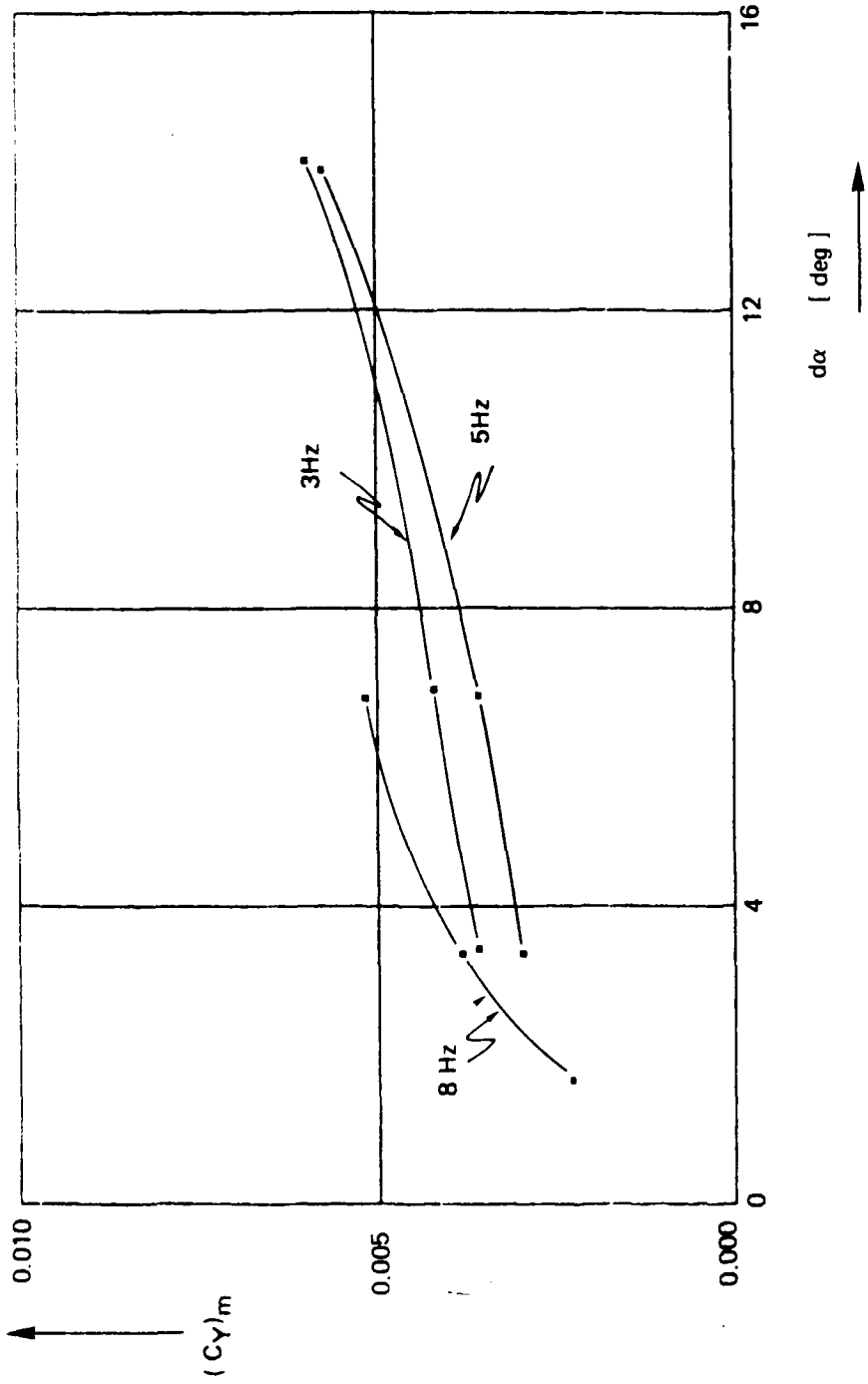


Fig. B11 Zeroth order harmonic component of unsteady side force coefficient vs. amplitude ($\alpha \approx 35.9$ deg, $\beta = 5$ deg, $V \approx 80$ m/s)

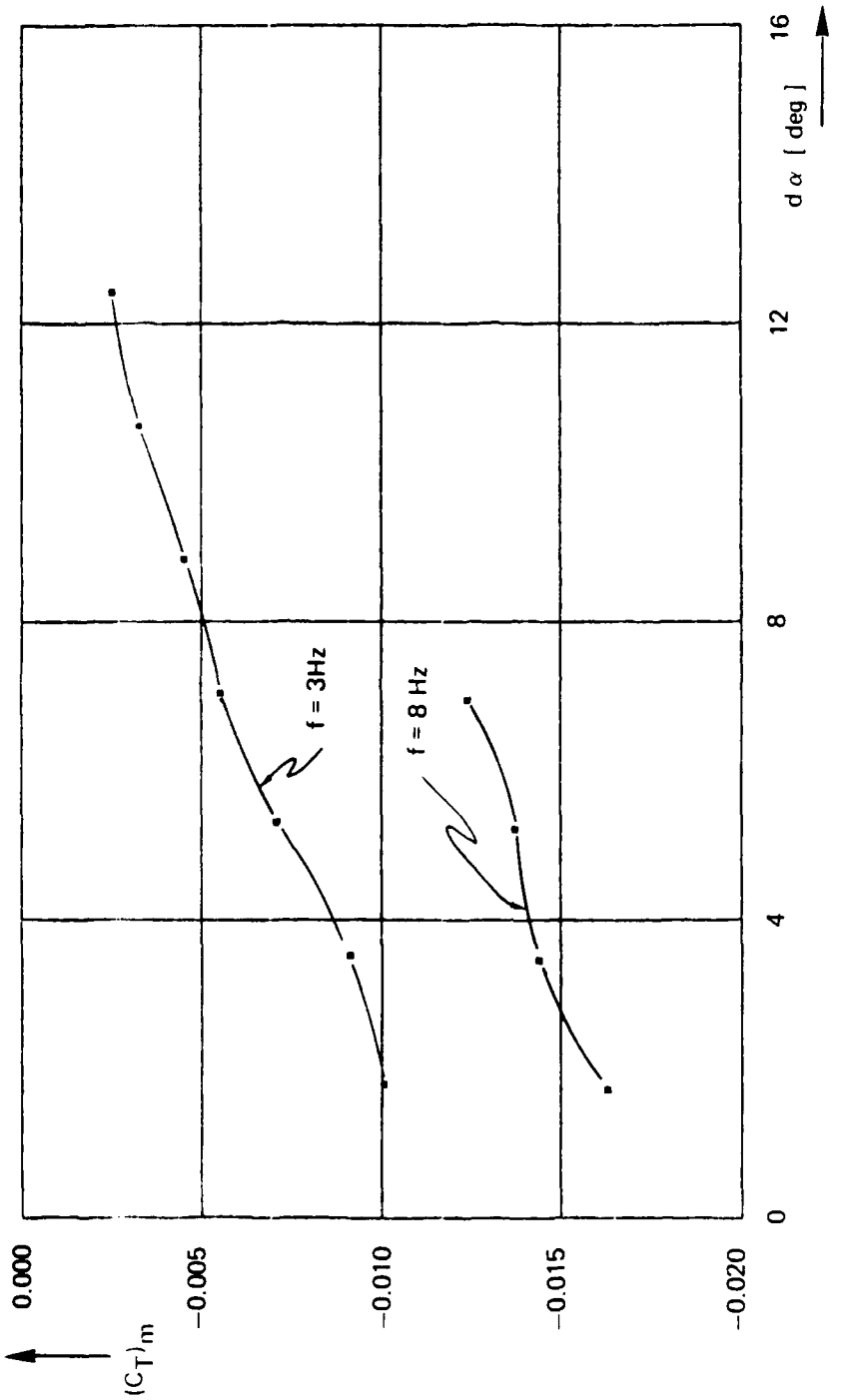


Fig. B12 Zeroth order harmonic component of unsteady tangential force coefficient vs. amplitude ($\alpha \approx 18.9$ deg, $\beta = 0$ deg, $V \approx 80$ m/s)

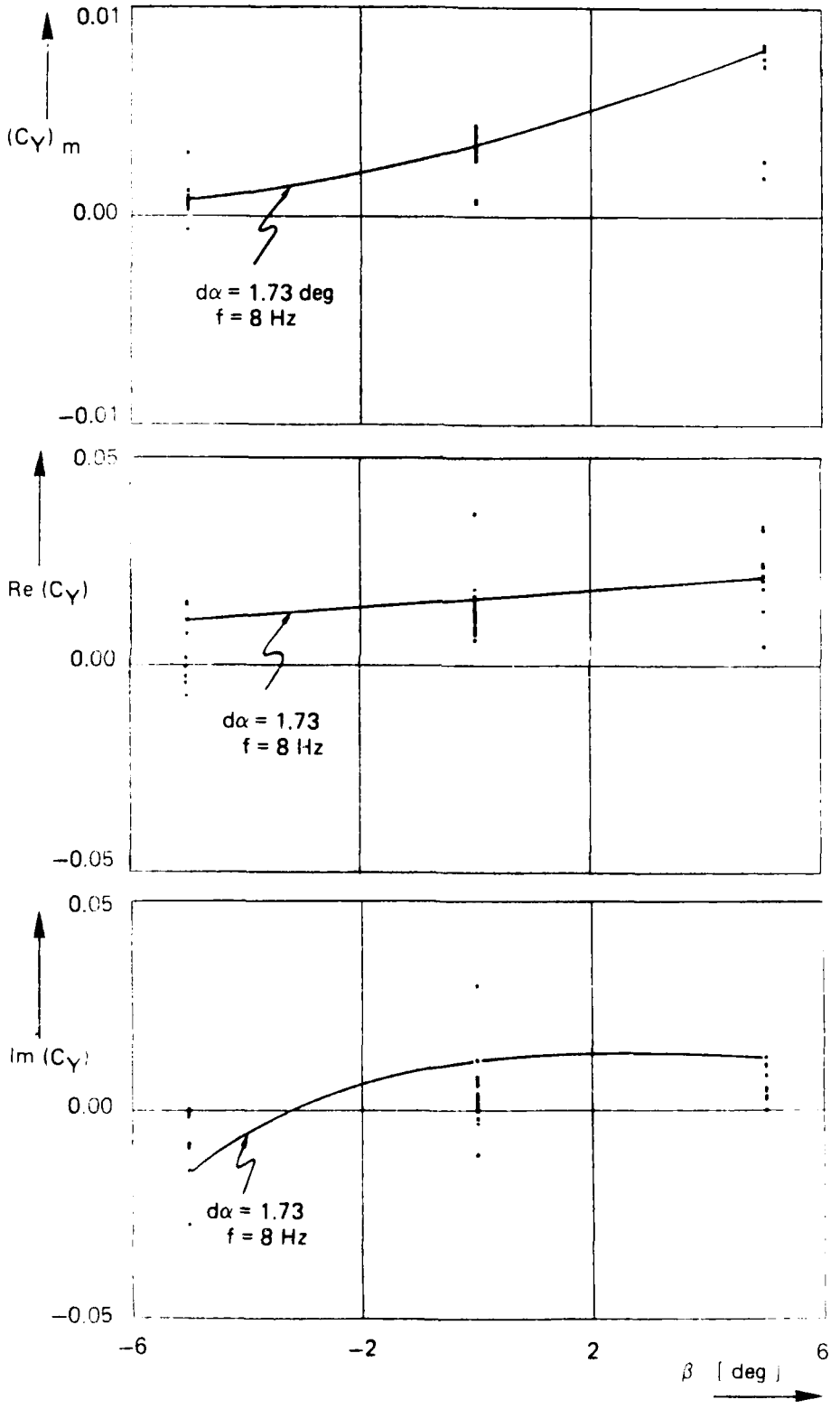


Fig. B13 The effect of sideslip on the zeroth and first order harmonic components of the unsteady side force coefficient at various frequency amplitude combinations ($\alpha \approx 18.9$ deg, $V \approx 80$ m/s)

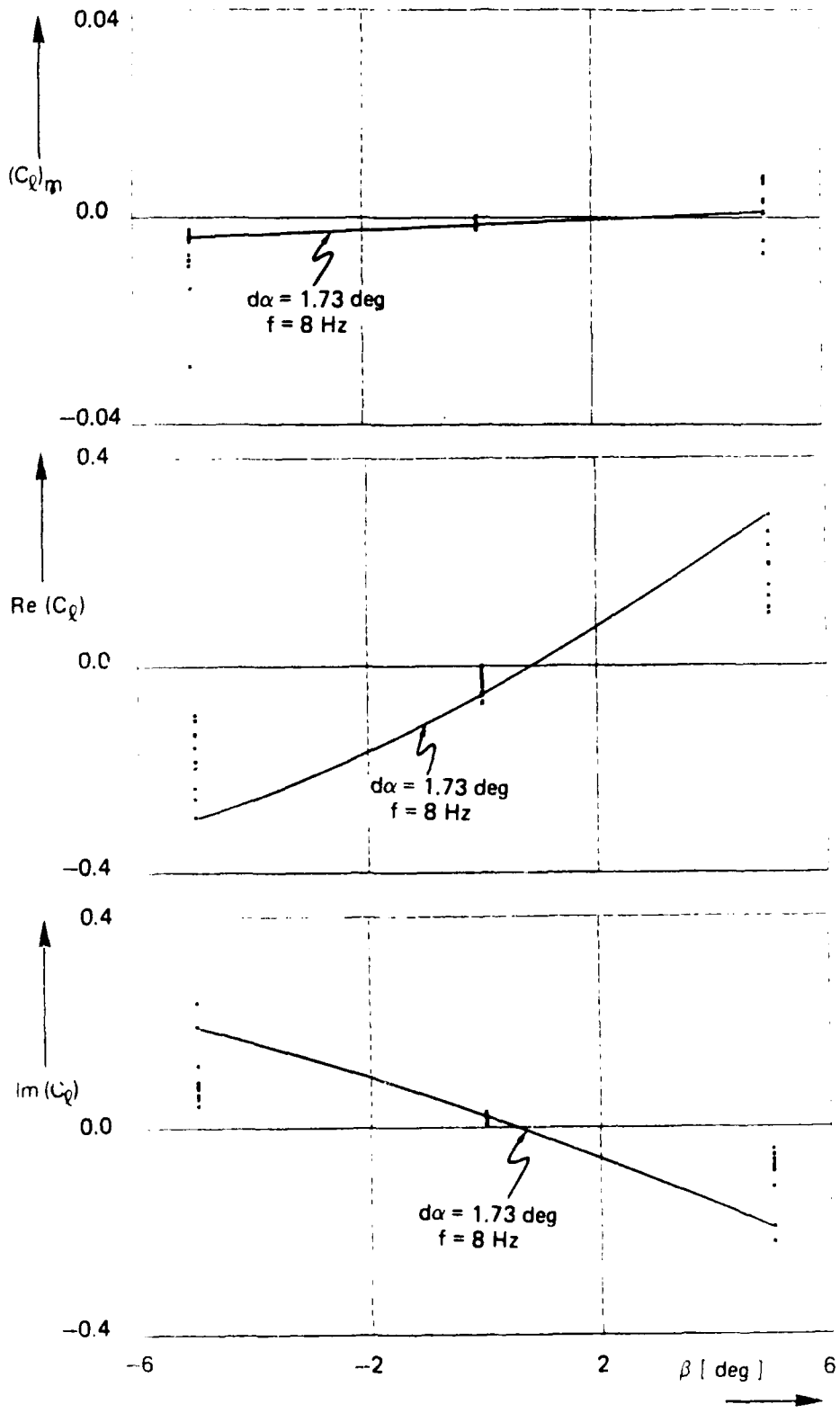


Fig. B14 The effect of sideslip on the zeroth and first order harmonic components of the unsteady rolling moment coefficient at various frequency amplitude combinations ($\alpha \approx 18.9$ deg, $V \approx 80$ m/s)

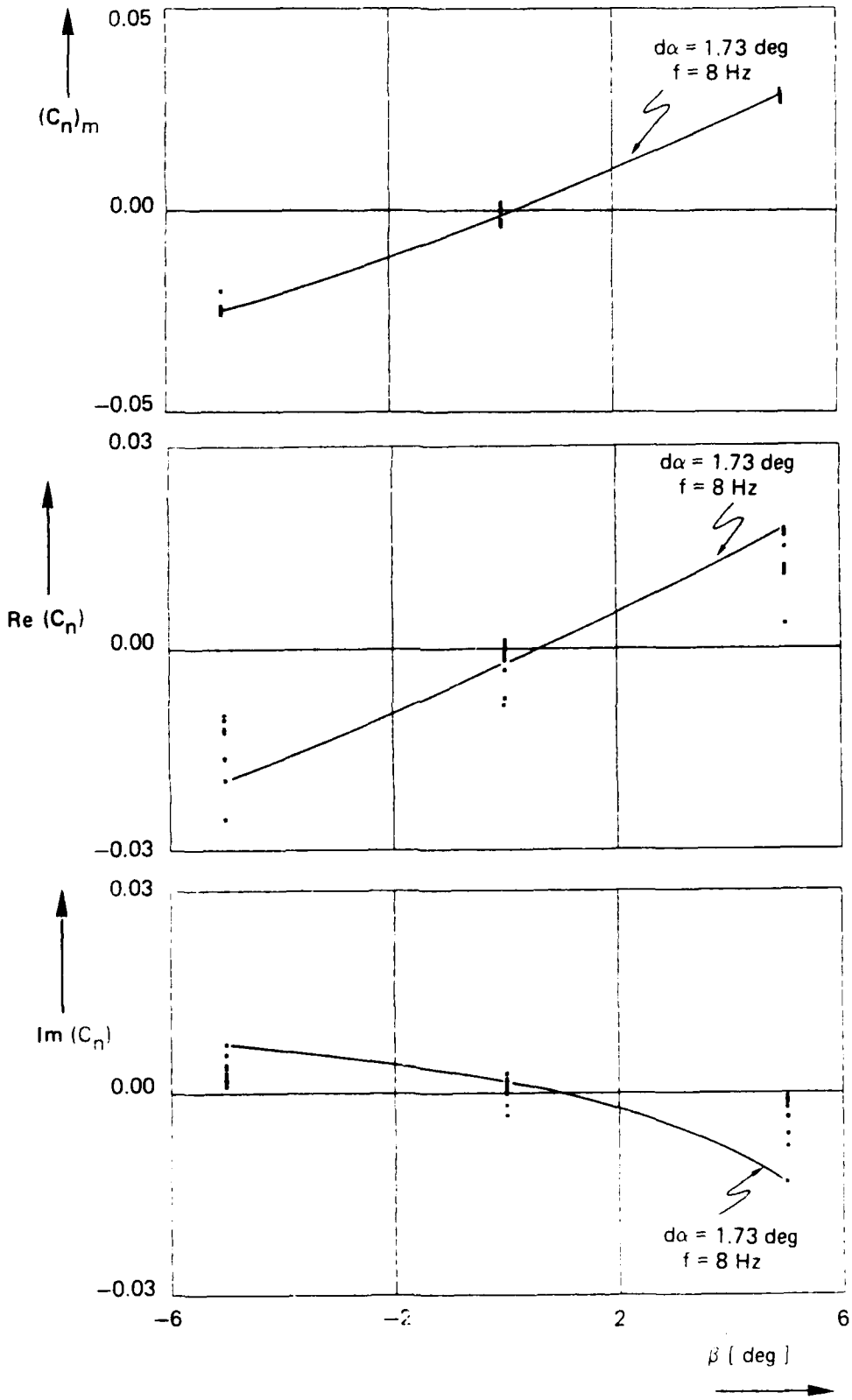


Fig. B15 The effect of sideslip on the zeroth and first order harmonic components the unsteady yawing moment coefficient at various frequency amplitude combinations ($\alpha \approx 18.9$ deg, $V \approx 80$ m/s)

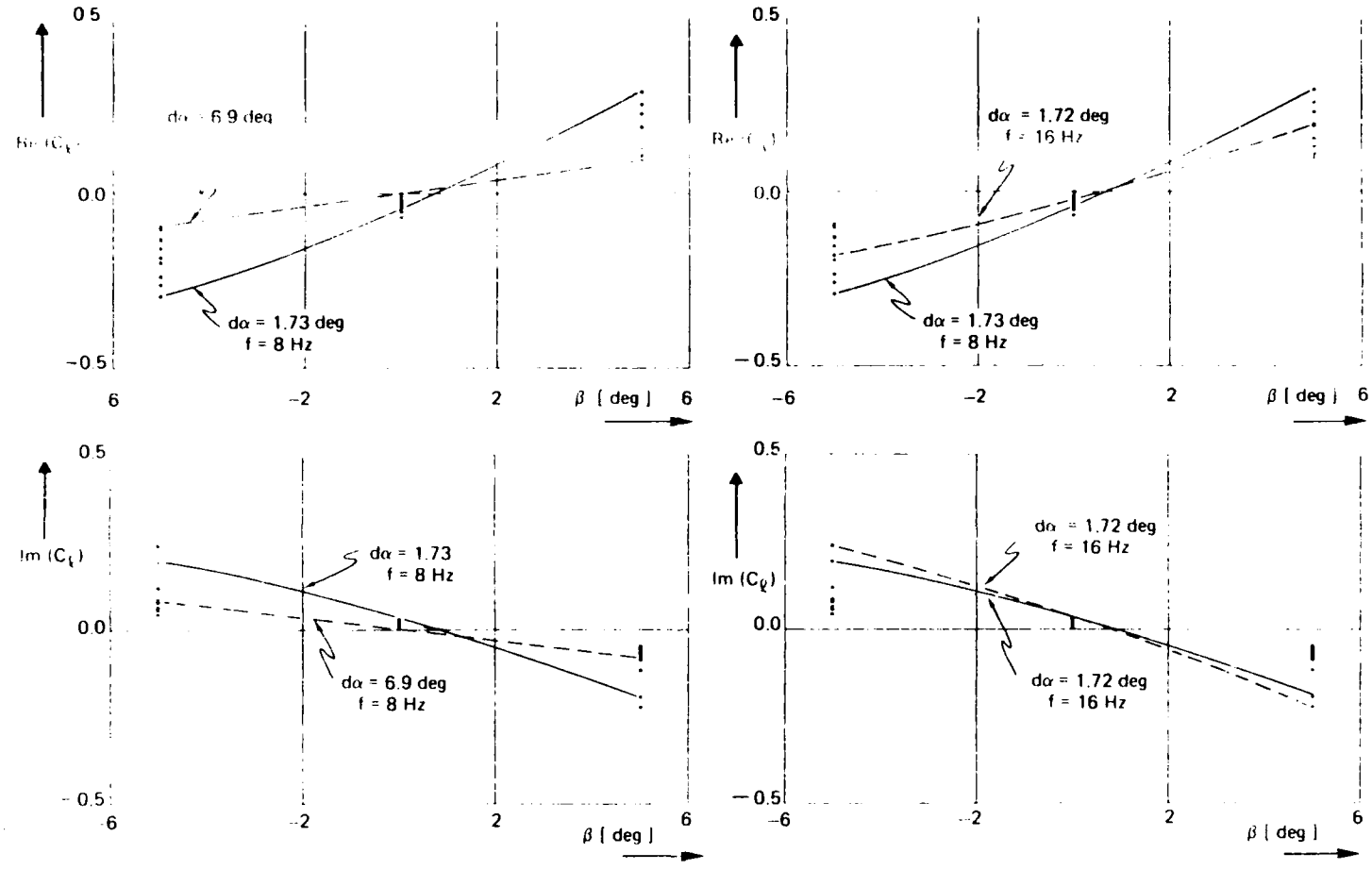


Fig. B16 The effect of sideslip on the first order harmonic component of the unsteady rolling moment coefficient ($\alpha \approx 18.9$ deg, $V \approx 80$ m/s)
Left side of figure : amplitude effect
Right side of figure: frequency effect